INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
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Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a
PSD/Significant Source Modification and a
Part 70 Operating Permit Renewal
for Subaru of Indiana Automotive, Inc. in Tippecanoe County

PSD/Significant Source Modification No. 157-36379-00050 and
Part 70 Operating Permit Renewal No. 157-36402-00050

The Indiana Department of Environmental Management (IDEM) has received an application from Subaru of Indiana Automotive, Inc. located at 5500 State Road 38 East, Lafayette, Indiana 47905 for a PSD/significant source modification and a renewal of its Part 70 Operating Permit issued on August 1, 2011. If approved by IDEM's Office of Air Quality (OAQ), the proposed modification would allow Subaru of Indiana Automotive, Inc. to install new combustion emission units instead of the units permitted in PSD/SSM 157-33759-00050, issued on May 19, 2014 and PSD/SSM 157-34774-00050. The proposed changes will require re-evaluation of PSD BACT.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions for case-by-case PSD BACT limitations. IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow the applicant to make this change.

A copy of the permit application and IDEM's preliminary findings are available at:

Tippecanoe Public Library
627 South Street
Lafayette, Indiana 47901

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit numbers PSD/SSM 157-36379-00050 and T157-36402-00050 in all correspondence.

Comments should be sent to:

Aida De Guzman
IDEM, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 3-4972
Or dial directly: (317) 233-4972
Fax: (317) 232-6749 attn: Aida DeGuzman
E-mail: adeguzma@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions please contact Aida DeGuzman of my staff at the above address.

Matthew Stuckey, Chief
Permits Branch
Office of Air Quality

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DRAFT

Part 70 Operating Permit Renewal
OFFICE OF AIR QUALITY

Subaru of Indiana Automotive, Inc.
5500 State Road 38 East
Lafayette, Indiana 47905

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T157-36402-00050	
Issued by: Matt Stuckey, Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

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Attachment C - 40 CFR Part 63, Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)

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Attachment G - 40 CFR Part 63, Subpart PPPPP - National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates an automotive and sport utility vehicle assembly plant.

Source Address:	5500 State Road 38 East, Lafayette, Indiana 47905
General Source Phone Number:	765-449-1111
SIC Code:	3711 (Motor Vehicles and Passenger Car Bodies)
County Location:	Tippecanoe
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

This stationary source consists of the following emission units and pollution control devices:

Paint Coating Line Systems A/B:

(a) Electrodeposition Coating of Vehicle Bodies (ED Coating Line), identified as Unit 001, with a capacity of 71 units per hour, constructed in 1989 and modified in 2009 and-2010. Approved in 2012 for modification to increase vehicle holding/storage area to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) ED Body Pretreatment area;

(2) One (1) ED Pretreatment Drying Oven, with one (1) insignificant natural gas indirect fired burner with a heat input capacity of 6.0 MMBtu/hr;

(3) One (1) insignificant boiler for paint temperature control, with a heat input capacity of 4.0 MMBtu/hr;

(4) Six (6) insignificant pretreatment boilers for warming water surrounding the ED Body Coating Tank, with a total heat input capacity of 9.0 MMBtu/hr;

(5) One (1) ED Body Coating Tank, utilizing dipping as the method of application;

(6) One (1) ED Body Oven (pretreatment drying oven) rated at 6.0 MMBtu/hr, with five (5) natural gas-fired burners (oven zones #1 through #5) each is rated at 2.5 MMBtu/hr, using a 2.5 MMBtu/hr natural gas-fired catalytic oxidizer (B-ED) as VOC control, and exhausting to one (1) stack, identified as B-ED Inc. (emissions from the entrance to, and exit from, the ED Body Oven use no controls and exhaust to one (1) stack, identified as B-ED Hood Exhaust);

(7) One (1) ED Body Cool Down area; and

(8) One (1) paint storage room.

(b) Sealing and PVC Undercoating Line, identified as Unit 002, with a capacity of 77 units per hour, constructed in 1989 and approved for modification in 2012, consisting of the following units:

(1) One (1) PVC Coating Booth #1, constructed in 1989, utilizing airless spray application system and pedestal robotic spray system, using a dry filter as particulate matter control, approved in 2012 for modification to add four (4) additional spray coating application systems, and exhausting to one (1) stack, identified as PVC-1-2;

(2) One (1) PVC Coating Booth #1 Preheat (oven zone #1), constructed in 1989, with one (1) natural gas indirect fired burner with a heat input capacity of 3.5 MMBtu/hr;

(3) One (1) PVC Coating Booth #2, constructed in 1999 and modified in 2006, utilizing the airless spray method of application, using a dry filter as particulate control, approved in 2012 for modification to add two (2) additional spray coating application systems and exhausting to one (1) stack, identified as PVC-Booth 2;

(4) One (1) PVC Coating Booth #2 Preheat (oven zone #2), constructed in 1999, with one (1) natural gas direct fired burner with a heat capacity of 3.5 MMBtu/hr;

(5) One (1) PVC Seal Oven, constructed in 1989, with two (2) insignificant natural gas-fired burners totaling 6.94 MMBtu/hr, using no controls, and exhausting to one (1) stack, identified as PVC-Oven Exhaust;

(6) One (1) PVC Cool Down area, constructed in 1989, using no controls, and exhausting to one (1) stack, identified as PVC Cooling; and

(7) One (1) Sound Deadener Operation approved in 2010 for construction, using no controls.

(c) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, modified in 2006, 2008, 2009, 2010 and 2013, and approved in 2016 for modification, consisting of the following units:

(1) One (1) Topcoat #1 Booth, approved in 2016 to replace existing spray applicators with automated electrostatic bell type spray applicators, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of 2.5 MMBtu/hr;

(2) One (1) Topcoat #1 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/h and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(3) One (1) Topcoat #1 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(4) One (1) Topcoat #1 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity

of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-1 Inc. (emissions from the entrance to and exit from the Topcoat #1 Oven are not controlled and exhaust to one (1) stack, identified as TC-1 Ex.). The oven is equipped with a purge exhaust stack;

(5) One (1) Topcoat #1 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-1 O.Cl.;

(6) One (1) Topcoat #2 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to ten (10) stacks, identified as TC2-1 through TC2-10. One (1) natural gas-fired dry off oven between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr;

(7) One (1) Topcoat #2 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/hr and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(8) One (1) Topcoat #2 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(9) One (1) Topcoat #2 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-2 Inc. (emissions from the entrance to and exit from the Topcoat #2 Oven are not controlled and exhaust to one (1) stack, identified as TC-2 Ex.). The oven is equipped with a purge exhaust stack;

(10) One (1) Topcoat #2 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-2;

(11) One (1) Topcoat #3 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to five (5) stacks, identified as TUT-1 through TUT-5;

(12) One (1) Topcoat #3 Booth Preheat, with two (2) natural gas-fired burners (oven zones #1 and #2), one (1) with a heat input capacity of 1.5 MMBtu/hr and one (1) with a heat input capacity of 2.5 MMBtu/hr;

(13) One (1) Topcoat #3 Booth Reheat, with one (1) insignificant 1.5 MMBtu/hr natural gas-fired burner (oven zone #3);

(14) One (1) Topcoat #3 Booth Oven, approved in 2013 for modification, with four (4) insignificant natural gas-fired burners with a total maximum heat input capacity of 8.55 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2. The oven is equipped with a purge exhaust stack;

(15) One (1) Topcoat #3 Booth Cool Down area;

(16) One (1) Topcoat #3 Booth natural gas indirect fired flash zone heater between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr, permitted in 2010 for construction; and

(17) Main paint mix room.

(d) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to include alterations to the conveyor system that will add storage capacity to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) Intermediate Working Stage burner (oven zone #1), with a heat input capacity of 2.5 MMBtu/hr;

(2) One (1) Intermediate Coating Booth, utilizing, two (2) robots, for the application of anti-chip (ACC), two (2) manual air assisted spray guns for the application of primer on inner doors for certain colors, followed by the exterior robot e-stat painting process, using a water wash as particulate control, and exhausting to six (6) stacks, identified as SUR-2 through SUR-7;

(3) One (1) Intermediate Booth Preheat (oven zones #2 and #3), with two (2) natural gas-fired burners, each with a heat input capacity of 2.5 MMBtu/hr;

(4) One (1) Intermediate Booth Reheat burner (oven zone #4), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(5) One (1) Intermediate Coating Oven, with five (5) insignificant natural gas direct fired burners totaling 12.42 MMBtu/hr, using a 1.0 MMBtu/hr natural gas-fired catalytic incinerator (SUR) as VOC control, and exhausting to one (1) stack, identified as SUR-1 (emissions from the entrance to and exit from the Intermediate Coating Oven use no controls and exhaust to one (1) stack, identified as Surfacer Hood Exhaust);

(6) One (1) Intermediate Cool Down area, using no controls, and exhausting to one (1) stack, identified as Surfacer Cooling; and

(7) Main paint mix room.

(e) Plastic Bumper Coating Line (PBL), identified as Unit 005, with a capacity of 60 units per hour, constructed in 1989 and modified in 2010, consisting of the following units:

(1) One (1) PBL Paint Booth, utilizing the air atomization and electrostatic bell methods of spraying, using a water wash as particulate matter control, and exhausting to four (4) stacks, identified as BPR-1, BPR-2, BPR-JR, and BPR-AP;

(2) One (1) PBL Booth Preheat (oven zone #1), with one (1) natural gas-fired burner with a heat input capacity of 1.5 MMBtu/hr;

(3) One (1) PBL Booth Reheat (oven zone #2), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(4) One (1) PBL Oven (ASH preheat), using a 17.1 MMBtu/hr natural gas-fired thermal incinerator as VOC control, and exhausting to one (1) stack, identified as BPR Inc.;

(5) One (1) PBL Cool Down area;

(6) Two (2) PBL natural gas-fired flash zone heaters for the primer and basecoat zones, each with a heat input capacity of 2.5 MMBtu/hr and exhausting to two (2) separate stacks, permitted in 2010 for construction; and

(7) One (1) paint mixing room.

(f) Anticorrosion Coating, identified as Unit 006, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to add two (2) spray coating systems at the Black Coat and Wax Booth to allow more vehicles coated hourly, including the following equipment:

(1) One (1) Black Coat and Wax Booth, utilizing the air atomized and air-assisted airless methods of spraying, using a dry filter as particulate matter control, exhausting to BCW Stack;

(2) One (1) Black and Wax Coat natural gas direct fired burner, with a heat input capacity of 24.0 MMBtu/hr;

(3) One (1) Anticorrosion Coating Booth, utilizing the air-assisted method of spraying, using a dry filter as particulate control, exhausting to Anticorrosion Stack; and

(4) One (1) insignificant Anticorrosion Coating natural gas-fired burner.

(g) One (1) plastic fascia paint line system, currently identified as PFPLS#2, approved in 2014 for physical modification and operational change as part of the proposed "2014 Increase in Capacity Project" for the plastic bumper coating operations. This will involve conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for Subaru vehicles, with an increase in capacity from 110,000 to 250,000 vehicles per year. PFPLS#2 will be renamed as Unit 005B, once production of non-Subaru vehicle ceases, which coats front and rear bumpers, and left and right side molding panels, with a maximum capacity of 150,118 units per year, constructed in 2006, and consisting of the following units:

(1) One (1) primer spray zone in the PFPLS#2 booth, now identified as Unit 005B, currently utilizing air atomized spray with robot method of application and automatic spray applicators with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack , identified as PB2(a). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(2) One (1) basecoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(b). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(3) One (1) clearcoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(c). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(4) Two (2) paint flash off areas for the primer zone and basecoat zone, exhausting to stack PB2(d), which includes natural gas-fired dry off ovens, with a total heat input capacity of 1.1 MMBtu/hr;

(5) Three (3) natural gas direct fired air intake units, each with a heat input capacity of 3.1 million British thermal units per hour (MMBtu/hr);

(6) One (1) fascia paint line, now Unit 005B natural gas-fired curing oven, with a heat input capacity of 2.5 MMBtu/hr, controlled by a catalytic/thermal oxidizer with a heat input capacity of 1.1 MMBtu/hr, exhausting to one (1) stack, identified as PB2(g). Approved in 2014 to increase oven length. Upon conversion to Subaru vehicles, the catalytic/thermal oxidizer will be removed from service.

(7) One (1) paint mix room.

(8) One (1) Natural gas-fired burner with a heat input capacity of 3 MMBtu/hr approved in 2014 for construction.

(9) Six (6) back-up manual spray applicators approved in 2014 for construction.

(h) Final Repair (Touchup) painting, identified as Unit 007, constructed in 1989 and approved in 2014 to increase capacity from 10 units per hour to 15 units per hour including the following::

(1) One (1) Touchup IPC Booth, located in the In-Process Control area, utilizing the air atomization method of spraying;

(i) Trim Line, identified as Unit 010, application in the Body Shop and Trim Shop of adhesives and sealers to various vehicle parts, constructed in 1989 and approved in 2012 for modification which includes increasing the line speed to allow more vehicles to be coated on an hourly basis and approved in 2014 for modification in order to accommodate a production increase from 310,000 vehicles per year to 450,000 vehicles per year:

(1) One (1) Trim Wax application line.

(2) One (1) startup and roll test operation.

(3) Robotic applicators, permitted in 2016 for construction in the window installation area of Trim Line B, Unit 010 to allow for a new quarter glass side window for a new vehicle model.

(4) Approved in 2016 to include chemical compound trans-1,3,3,3-tetrafluoropropene in the air conditioning refrigerant for use in vehicles assembled on Trim Lines A and B.

(j) Six (6) storage tanks, identified collectively as Unit 011, approved in 2014 to increase utilization to accommodate the increase in production capacity from 310,000 vehicles per year to 450,000 vehicles per year, which includes the following equipment:

(1) Gasoline storage tank, with a capacity of 15,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(2) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(3) Waste purge thinner storage tank, with a capacity of 6,000 gallons, constructed in 1992;

(4) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 2005;

(5) Windshield washer fluid storage tank, with a capacity of 5,000 gallons, constructed in 1988; and

(6) Gasoline storage tank, with a capacity of 1,500 gallons, installed in 2004.

(k) Purge Solvent usage and capture system, identified as Unit 012, constructed in 1989 and modified in 2006 and 2010 to allow for purging and capturing of solvent and waterborne purge materials.

Paint Coating Line System C, with a maximum capacity of 160,000 vehicles per year, approved in 2014 for construction, dedicated in coating of the increase in vehicle production, consisting of the following units:

(a) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through 13-9 consisting of the following units:

(1) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, comprised of six (6) units with a maximum heat input capacity of 1.3 million British thermal units per hour (MMBtu/hr) each and a total maximum heat input of 7.8 MMBtu/hr permitted in 2016 for construction.

(2) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(3) One (1) ED Oven (pretreatment drying oven), with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(4) One (1) ED Body Cool Down Area.

(5) One (1) ED Deck and ED Sand Area.

(6) One (1) Paint Storage Room.

(7) One (1) Working Stage Air House #1 to support the Prep Deck and Offline Areas rated at 11.0 MMBtu/hr, permitted in 2016 for construction.

(8) One (1) Working Stage Air House RFH to support the Surfacer Sand, Wet Sand #1 and #2, ED Sand, Sealer and PVC Area with no heating components.

(b) Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Line, identified as Unit 014, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 3 exhaust stacks, identified as Stacks 14-1 through 14-3, consisting of the following:

(1) One (1) PVC Coating Booth #1, equipped with airless spray application and pedestal robotic spray system, using a dry filter to control the particulate overspray emissions.

(2) One (1) PVC Sealer Oven, with a maximum heat input capacity of 3.5 MMBtu/hr, using no control, permitted in 2016 for construction.

(3) One (1) PVC Cool Down Area, using no controls.

(4) One (1) Sealer Application Area, using no controls.

(5) One (1) LASD (Liquid Applied Sound Deadener) Application Area, using no controls.

(c) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(1) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Intermediate Coating Oven, with a maximum heat input capacity of 10.1 MMBtu/hr, with no VOC control, permitted in 2016 for construction

(3) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at 2.5 MMBtu/hr, permitted in 2016 for construction.

(4) One (1) Intermediate (Surfacer) Air House rated at 26.5 MMBtu/hr permitted in 2016 for construction.

(5) One (1) Intermediate Cool Down Area, using no controls.

(6) One (1) main paint mix room.

(d) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-1 through 16-26, consisting of the following:

(1) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of 7.6 MMBtu/hr, using a 0.99 MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control, permitted in 2016 for construction.

(3) One (1) Topcoat natural gas-fired flash zone heater rated at 2.5 MMBtu/hr permitted in 2016 for construction.

(4) One (1) Topcoat #C1 Cool Down Area, using no controls.

(5) One (1) main paint mix room.

(6) One (1) Topcoat Air House rated at 42.0 MMBtu/hr, permitted in 2016 for construction.

(7) One (1) Paint Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

(e) Anticorrosion Coating Operations , identified as Unit 017, with a capacity of 225,000 units per year (to be built as part of existing paint lines A/B), approved in 2014 for construction, venting to 2 exhaust stacks, identified as Stacks 17-1 through 17-2**,** consisting of the following units:

(1) One (1) Black and Wax Coating Booth, to be part of existing paint lines A/B, equipped with air atomized and air-assisted airless spray systems, using a dry filter to control the particulate overspray emissions.

(2) One (1) Black and Wax Coating Booth natural gas-fired burner, with a maximum heat input capacity of 13.7 MMBtu/hr, permitted in 2016 for construction.

(3) One (1) wax application line in the Trim & Final Assembly Area.

(f) Miscellaneous combustion devices, approved in 2016 for construction:

(1) One (1) Working Stage Air House #2 used to support the Inspection, Touch-up area rated at 11.0 MMBtu/hr.

(2) One (1) Working Stage Air House used to support Paint Coating Line C with no heating components.

(g) Purge solvent usage and capture system, identified as Unit 019, approved in 2014 for construction, designed to allow for purging and capturing of solvent and waterborne purge materials.

(h) Miscellaneous support cleaning operations, identified as Unit 020, approved in 2014 for construction, which include wiping solvent and miscellaneous cleanup materials.

(i) An additional Startup and Roll Test Line, approved in 2014 for construction.

(j) Engine assembly -

(1) one (1) additional dynamometer gasoline engine testing, where engines are tested prior to installation in the vehicle chassis, approved in 2014 for construction.

(2) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]

This stationary source also includes the following insignificant activities as defined in 326 IAC 2-7-1(21):

(a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(1) Six (6) general hot water boilers with a combined heat input capacity of 19.6 MMBtu/hr. [40 CFR 52.21] [326 IAC 2-2] [326 IAC 6-2-4]

(2) Other insignificant natural gas combustion units: [326 IAC 2-2]

(A) Stamping Shop Steam Cleaner

(B) Distillation Room Heater

(C) Makeup Air Units (7)

(D) Unit Heaters (50)

(E) Door Heaters (14)

(F) Air Handling Units (48)

(G) Heating and Ventilation Units (6)

(3) Other insignificant natural gas combustion units approved in 2014 and 2016 for construction: [326 IAC 2-2]

(A) Rooftop Units -
- Engine Assembly Expansion - 4 Units (1.6 MMBtu/hr total)
- Engine Warehouse Expansion - 2 Units (0.8 MMBtu/hr total)
- Trim Warehouse Phase 1 - 5 Units (2.0 MMBtu/hr total)
- Trim Warehouse Phase 2 - 7 Units (2.8 MMBtu/hr total)
- Trim Warehouse Phase 3 - 7 Units (2.8 MMBtu/hr total)
- Stamping Warehouse 1 - 4 Units (1.6 MMBtu/hr total)
- Motor Pool Bldg. - 5 Units (2.0 MMBtu/hr total)
- Paint Coating Line C Heating and Cooling Units - 10 units (7.4 MMBtu/hr total)
- Paint Coating Line C Makeup Air Heating Units - 5 units (8.1 MMBtu/hr total)
- Paint Coating Line C Air Handling Units - 2 units (8.3 MMBtu/hr total)

(B) Heater Units -
- Engine Warehouse Expansion - 2 Units (0.8 MMBtu/hr total)
- Trim Warehouse Phase 1 - 3 Units (1.2 MMBtu/hr total)
- Trim Warehouse Phase 2 - 3 Units (1.2 MMBtu/hr total)
- Trim Warehouse Phase 3 - 4 Units (1.6 MMBtu/hr total)
- Motor Pool Accessary Bldg - 2 Units (0.8 MMBtu/hr total)
- Paint Coating Line C Heater Units - 17 units (6.8 MMBtu/hr total)

(C) Natural Gas-Fired Boiler:
One (1) spray booth boiler comprised of six (6) units with a maximum heat input rate of 1.25 MMBtu/hr each and a total maximum heat input rate of 7.5 MMBtu/hr.

(D) Emergency Equipment:

(1) One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (rated at 636 HP), permitted in 2016 for construction.

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 2-2]

(1) (A) One (1) Stamping Shop; and
(B) One (1) bumper injection machine approved in 2014 for installation within the existing building, required for the capacity increase to 450,000 vehicles per year, and

(2) Two (2) body lines within one (1) Body Shop with MIG and resistance welding robots, and one grinding booth, constructed in 1989 and approved for modification in 2012 and 2014 to expand the Body Shop Building to include a Parts Storage Area and Body Shop Processing Area including the following:

(A) One (1) natural gas-fired air supply unit, with a maximum heat input capacity of 1.73 million British thermal units per hour (MMBtu/hr).

(B) MIG welding operations, with a maximum welding rod usage of 96,105 pounds per year.

(c) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(d) Deburring; buffing; polishing; abrasive blasting activities; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

(e) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) Gasoline Fill Operations (Benzene, Naphthalene, Ethylbenzene, Styrene, Toluene, Hexane, Xylene, Methyl Tert-butyl Ether) [326 IAC 2-2]

(2) The following storage tanks permitted under OP 79-09-93-0454, issued on July 26, 1989:

(A) One (1) double-walled fixed-roof engine oil storage tank, with a capacity of 5,000 gallons; and

(B) One (1) double-walled fixed-roof power steering fluid storage tank, with a capacity of 5,000 gallons;

(3) The following activities permitted under E 157-14535-00050, issued on October 10, 2001: engine assembly and testing (including engine test stands);

(4) Manual solvent wipe-down.

(5) One (1) power steering fluid storage tank, with a capacity of 5,000 gallons, installed in 1988.

(6) One (1) transmission oil storage tank, with a capacity of 5,000 gallons, installed in 1988.

(7) One (1) Antifreeze storage tank, with a capacity of 10,000 gallons, installed in 1988.

(8) One (1) Antifreeze storage tank, with a capacity of 12,000 gallons, installed in 1988.

(f) Activities associated with emergencies, including the following:

Emergency generators as follows:

(1) Diesel generators not exceeding one thousand six hundred (1,600) horsepower.

(A) One 760 HP diesel fueled emergency generator engine, installed in 1989.

(2) Natural gas turbines or reciprocating engines not exceeding sixteen thousand (16,000) horsepower.

(A) One (1) 180 HP natural gas fired emergency engine, installed in 1997
(B) One (1) 225 HP natural gas fired emergency engine, installed in 2010

Stationary fire pump engines as follows:

(1) Two 375 HP diesel fired emergency fire pumps, installed in 1989.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

(a) This permit, T157-36402-00050, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A "responsible official" is defined at 326 IAC 2-7-1(35).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T157-36402-00050 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b) or (c) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)

77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1) and (c)(1).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(37)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee’s right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of

326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(11)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.14 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

(I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

(II)

(a) CAM *Response to excursions or exceedances.*

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range,

designated condition, or below the applicable emission limitation or standard, as applicable.

(2) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a Quality Improvement Plan (QIP). The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(c) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) *CAM recordkeeping requirements.*

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(c) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping

Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(33) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring

sample, measurement, report, or application. Support information includes the following, where applicable:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3] [40 CFR 64][326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (oo) and/or 326 IAC 2-3-1 (jj)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (ww) and/or 326 IAC 2-3-1 (pp), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for

review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Source-Wide Operations

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Prevention of Significant Deterioration (PSD) - Particulate Matter [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989; CP 157-4485-00050, issued September 13, 1995; CP 157-9619-00050, issued February 11, 1999 and PSD/SSM 157-29566-00050, issued on December 22, 2010 and PSD/SSM 157-33759-00050, the Permittee must adhere to the following conditions:

(a) The source (including, for purposes of this paragraph (a), paint coating line systems A/B and paint coating line system C) shall not produce greater than 450,000 vehicles per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The particulate (PM/PM10) emissions from PVC Coating Booth #1, PVC Coating Booth #2, Topcoat #1 Coating Booth, Topcoat #2 Coating Booth, Topcoat Booth #3, Intermediate (Surfacer) Coating Booth, PBL Paint Booth, Black Coat and Wax Booth, Anticorrosion Coating Booth, Touchup IPC Coating Booth, source-wide natural gas combustion (excluding, for purposes of this paragraph (b), those natural gas combustion units subject to Condition D.9.1(c) and the 4.8 MMBtu/hr natural gas-fired emergency generator), and all insignificant facilities that were permitted by the PSD (79) 1651 Revision at paint coating line systems A/B shall be limited to less than 23.1 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) The total natural gas combustion at the source (excluding, for purposes of this paragraph (c), those natural gas combustion units subject to Condition D.9.1(c) and the 4.8 MMBtu/hr natural gas-fired emergency generator) shall not exceed 2,380 million standard cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month.

The NOx emissions from the source (excluding, for purposes of this paragraph (c), those natural gas combustion units subject to Condition D.9.1(c) and the 4.8 MMBtu/hr natural gas-fired emergency generator) shall not exceed 100 pounds per million cubic feet (lb/MMCF) of natural gas.

Compliance with Condition D.1.1(a) shall satisfy the requirements of 326 IAC 2-2, PSD rules.

Compliance with Condition D.1.1(b) and (c) shall render the requirements of 326 IAC 2-2, PSD rules not applicable.

D.1.2 Prevention of Significant Deterioration (PSD) - Carbon Monoxide and Sulfur Dioxide [326 IAC 2-2]

Compliance with the total natural gas combustion limitation contained in Condition D.1.1(c) is equivalent to CO and SO2 emissions of less than 100 tons per year, and 40 tons per year, respectively, and renders the requirements of 326 IAC 2-2 not applicable.

D.1.3 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2][326 IAC 8-1-6]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989; Significant Source Modification 157-22702-00050, issued on June 9, 2006; SSM/PSD 157-29566-00050, issued on December 22, 2010; 326 IAC 2-2-3 and 326 IAC 8-1-6, the total VOC emissions from all

surface coating and associated purge solvent operations, wiping/cleaning solvents, and storage at paint coating line systems A/B shall not exceed 1,084.5 tons per twelve consecutive month period with compliance determined at the end of each month.

Compliance with this limitation, and those contained in Conditions D.2.1, D.4.1, D.5.1, D.6.1, D.7.1, and D.8.1, shall satisfy the requirements of 326 IAC 2-2 and 326 IAC 8-1-6.

Compliance with the VOC limit in this condition, and the VOC limits in Conditions D.3.1 and D.4.6, shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable to the source modification permitted in SSM 157-22702-00050.

Compliance Determination Requirements[326 IAC 2-7-5(1)]

D.1.4 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

(a) Compliance with the VOC emissions limit in Condition D.1.3 shall be determined by using the following equation, which calculates tons of VOC emissions per month, and adding the result to the calculated VOC emissions from the previous eleven months:

Total VOC Emissions (ton/month) = ED Coating, Unit 001 VOC + Sealing and PVC Underbody Coating, Unit 002 VOC + Topcoat, Unit 003 VOC + Intermediate Surfacer, Unit 004 VOC + Plastic Bumper (PBL), Unit 005 VOC + Anticorrosion Coating, Unit 006 VOC Final Repair, Unit 007 VOC + Trim Line, Unit 010 VOC + Storage Tanks, Unit 011 VOC +Purge Solvent usage and capture, Unit 012 VOC + Natural Gas Combustion VOC + Insignificant VOC Sources

Where:

VOC emissions from each coating booth, $Vb = \sum_{i=1}^{n} (Ci \times Di \times Wi) \times (1-CE) \times 1 \text{ ton}/2000 \text{ lbs}$

Vb = VOC emissions from each coating booth, ton/month
Ci = usage of coating i in gallons per month;
Di = density of coating i in pounds per gallon;
Wi = weight percent organics from coatings i
CE = overall VOC control efficiency for each booth, when applicable.

Natural Gas Combustion VOC Emissions, tons/month = natural gas usage (MMCF/month) x 1020 MMBtu/1MMCF x 0.0054 lb VOC/MMBtu x 1 ton/2000 lbs

(b) Compliance with the particulate (PM/PM10) emission limit in Condition D.1.1(b) shall be determined by using the following equation, which calculates pounds of particulate emissions per month, and adding the result to the calculated particulate emissions from the previous eleven months:

Total Particulate Emissions (lb/month) = PVC Coating Booth #1 PM/PM10 + PVC Coating Booth #2 PM/PM10 + Topcoat #1 Booth PM/PM10 + Topcoat #2 Booth PM/PM10 + Topcoat #3 Booth PM/PM10 + Intermediate (Surfacer) Coating Booth PM/PM10 + PBL Paint Booth PM/PM10 + Black Coat and Wax Booth PM/PM10 + Anticorrosion Coating Booth PM/PM10 + Touchup IPC Coating PM/PM10 + Natural Gas

Combustion PM/PM10 + Insignificant PM/PM10 Sources

Where:

PM/PM10 emissions from each coating booth = $\sum_{i=1}^{n}$ (Ci * D i* Si) * (1-TE) * (1-CE);

Natural Gas Combustion PM/PM10 = natural gas usage (MMCF/month) * 7.6 lb PM/MMCF;

Insignificant PM/PM10 Sources = PM/PM10 emissions in lb/month from insignificant facilities that were permitted by the PSD (79) 1651 Revision;

Ci = usage of coating i in gallons per month;

Di = density of coating i in pounds per gallon;

Si = solids content of coating i, expressed as a decimal weight percent;

TE = solids transfer efficiency of the applicator for each booth, based on transfer efficiency determination tests; and

CE = overall particulate control efficiency for each booth, based on manufacturer data.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.5 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1, D.1.2 and D.1.3, the Permittee shall maintain records in accordance with (1) through (11) below. Records maintained for (1) through (11) shall be taken as stated below and shall be complete and sufficient to establish the compliance status with the particulate emission limit established in Condition D.1.1(b), the natural gas combustion limit established in Conditions D.1.1(c) and D.1.2 and the VOC emission limit established in Condition D.1.3. Records necessary to demonstrate the compliance status shall be available not later than 30 days after the end of each compliance period.

(1) The VOC content of each coating material and solvent (including purge solvents and thinners) used less water.

(2) The amount of coating material and solvent (including purge solvents and thinners) used on a daily or monthly basis, consistent with applicable limits in other permit conditions.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvent.

(3) The total VOC emissions from coatings and solvents (including purge solvents and thinners) for each day.

(4) The amount of coating material and solvent (including purge solvents and thinners) transferred off-site for disposal or recycling for each day.

(5) The density of each coating.

(6) The solids content of each coating, expressed as a decimal weight percent.

(7) The particulate transfer efficiency and particulate control efficiency for each surface coating booth, kept on a monthly basis, and an explanation of how these figures were determined.

(8) The process weight rate of the insignificant robotic welding, brazing equipment, cutting torches, soldering equipment, grinding equipment, and machining equipment.

(9) Any process information necessary to calculate particulate (PM/PM10) emissions from other insignificant operations described in Section D.8 (e.g., deburring, buffing, polishing, abrasive blasting activities, pneumatic conveying, woodworking operations, etc.).

(10) A log of the dates of use.

(11) The plant-wide metered natural gas usage for each month.

(b) To document the compliance status with Condition D.1.1(a), the Permittee shall maintain records of monthly vehicle production.

(c) To document the compliance status with the Condition D.1.3, the Permittee shall monitor and record the post-change annual VOC emissions from the existing emission units that could result in a significant emissions increase as a result of the project described in SSM 157-22702-00050.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.6 Reporting Requirements

(a) Reports of monthly production totals to demonstrate the compliance status with Condition D.1.1(a), shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

(b) Based on records required by Condition D.1.5(a), and to demonstrate the compliance status with Condition D.1.1(b), reports of monthly particulate (PM/PM10) emissions shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

(c) Reports of monthly natural gas usage to demonstrate the compliance status with Conditions D.1.1(c) and D.1.2 shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

(d) Based on records required by Condition D.1.5(a) to demonstrate the compliance status with Condition D.1.3, reports of monthly VOC emissions from surface coating operations and associated purge solvent operations and storage shall be submitted to IDEM, OAQ on a quarterly basis not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(e) Plastic Bumper Coating Line (PBL), identified as Unit 005, with a capacity of 60 units per hour, constructed in 1989 and modified in 2010:

(1) One (1) PBL Paint Booth, utilizing the air atomization and electrostatic bell methods of spraying, using a water wash as particulate matter control, and exhausting to four (4) stacks, identified as BPR-1, BPR-2, BPR-JR, and BPR-AP;

(2) One (1) PBL Booth Preheat (oven zone #1), with one (1) natural gas-fired burner with a heat input capacity of 1.5 MMBtu/hr;

(3) One (1) PBL Booth Reheat (oven zone #2), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(4) One (1) PBL Oven (ASH preheat), using a 17.1 MMBtu/hr natural gas-fired thermal incinerator as VOC control, and exhausting to one (1) stack, identified as BPR Inc.; and

(5) One (1) PBL Cool Down area.

(6) Two (2) PBL natural gas-fired flash zone heaters for primer and basecoat zones, each with a heat input capacity of 2.5 MMBtu/hr, and exhausting to two (2) separate stacks, permitted in 2010 for construction.

(7) One (1) paint mixing room.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2][326 IAC 8-1-6]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, 326 IAC 2-2-3, and 326 IAC 8-1-6, BACT for the Plastic Bumper Coating Line is the following:

(a) The daily VOC emissions from the PBL Paint Booth shall not exceed 38.2 pounds of VOC per gallon of applied solids (4.57 kilograms of VOC per liter of applied solids). This limit applies to the weighted average of all plastics bumper coatings. Compliance with this limit shall be demonstrated pursuant to Condition D.2.6.

(b) The thermal incinerator, used to control VOC emissions from the PBL Oven, shall achieve a minimum VOC destruction efficiency of 90%.

(c) Pretreatment Cleaning shall utilize only VOC free detergents, conditioners, and rinses in the body pre-treatment cleaning operations.

(d) Pertaining to purge solvent use:

(1) Purge solvent capture systems will be utilized each time that any coating application equipment is purged. The purge solvent capture systems shall have a minimum overall capture efficiency of at least eighty percent (80%). Collected purge solvent shall be retained in closed conveyances to the

Permittee's spent purge solvent storage tank or in closed containers until such time as they are shipped offsite for disposal or recycling.

(2) Block painting will be utilized whenever possible to minimize color changes and the resulting purge.

Compliance with these limitations, and those contained in Conditions D.1.3, D.4.1, D.5.1, D.6.1, D.7.1, and D.8.1, shall satisfy the requirements of 326 IAC 2-2 and 326 IAC 8-1-6.

D.2.2 Prevention of Significant Deterioration - Best Available Control Technology for Volatile Organic Compounds (VOC and Nitrogen Oxides (NOx) [326 IAC 2-2]

(a) Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for NOx for the natural gas combustion equipment described in this section is the following:

(1) The NOx emissions from the PBL Oven shall not exceed 0.10 pounds per million Btu (lb/MMBtu) heat input;

(2) The NOx emissions from the PBL Booth Preheat Burner, insignificant PBL Oven thermal incinerator, and the two (2) insignificant PBL Booth Reheat burners shall not exceed 0.12 pounds per million Btu (lb/MMBtu) heat input each; and

(3) The PBL Preheat burner, Reheat burners, and Oven shall use low-NOx natural gas burners.

(b) Pursuant to PSD/SSM 157-29566-00050 and 326 IAC 2-2-3, VOC BACT for the two (2) 2.5 MMBtu/hr PBL Flash Zone Heaters shall each not exceed 0.0055 pound per million British thermal units (lb/MMBtu).

(c) The Permittee shall perform good combustion practices for the two (2) 2.5 MMBtu/hr PBL Flash Zone Heaters and utilize natural gas only for fuel.

Compliance with these limits and those contained in D.4.2, D.6.2, and D.8.2, shall satisfy the requirements of 326 IAC 2-2.

D.2.3 Particulate Emissions [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate emissions from the PBL Paint Booth shall be controlled by a water wash and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.2.4 Particulate Emissions from Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the particulate emissions from the two (2) PBL flash zone heaters one (1) with rated capacity of 1.5 MMBtu/hr and one (1) with rated capacity of 2.5 MMBtu/hr including a 17.1 MMBtu/hr PBL Oven/Incinerator (ASH preheat), shall not exceed 0.314 lb/MMBtu.

This limitation is based on the following equation

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 120 MBtu/hr).

D.2.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their respective control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements[326 IAC 2-7-5(1)]

D.2.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Compliance with the VOC emission limit in Condition D.2.1 shall be determined with the following equation:

$$\text{VOC emissions (lb VOC/gal applied solids)} = \left[\sum_{i=1}^{n} (C_i)(U_i) \Big/ \sum_{i=1}^{n} (S_i \times TE)\right] \times [1 - (CE \times DE)]$$

Where:

C_i is the VOC content of the coating ($_i$) in pounds of VOC per gallon of coating, as applied;
U_i is the usage rate of the coating ($_i$) in gallons per day;
S_i is the usage rate of coating ($_i$) solids in gallons per day;
TE is the transfer efficiency of the applicator;
CE is the minimum capture efficiency of the incinerator; and
DE is the minimum destruction efficiency of the incinerator required in Condition D.2.1(b).

D.2.7 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

(a) Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the incinerator at all times the PBL Oven is in operation to ensure compliance with Condition D.2.1.

(b) The incinerator on the PBL Oven shall be operated such that it achieves the minimum destruction efficiency specified in Condition D.2.1.

D.2.8 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.2.1, the Permittee shall perform VOC capture and destruction efficiency testing of the thermal incinerator utilizing methods as approved by the Commissioner at least once every two and one half (2.5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures) for control efficiency testing. Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

D.2.9 Operator Training Program

The Permittee shall implement an operator training program.

(a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the water wash control system on the Plastic Bumper Coating Line. All existing operators shall be trained upon permit issuance. All new operators shall be trained upon hiring or transfer.

(b) Training shall include proper flow of water through the water pan of the water wash system, and other factors that affect water pan capture efficiency (e.g., debris in the water pans), and troubleshooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document

successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.

(c) All operators shall be given refresher training annually.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.10 Thermal Incinerator Temperature [326 IAC 2-7-5(3)] [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal incinerator for measuring operating temperature whenever the PBL Oven (ASH preheat) is in operation. For the purposes of this condition, continuous monitoring shall mean no less often than once per minute. The output of this system shall be recorded as a three-hour average. If the continuous monitoring system is not in operation, the temperature will be recorded manually once in a 15-minute period. Whenever the three (3) hour average temperature is below the three (3) hour average temperature established during the latest stack test that demonstrated compliance, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with the limits of Condition D.2.1 as approved by IDEM.

The instruments used for determining the temperature shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.2.11 Parametric Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage for the thermal incinerator on the PBL Line from the most recent valid stack test that demonstrates compliance with the permit limits on VOC destruction efficiency and control efficiency as approved by IDEM.

(b) The duct pressure or fan amperage whichever is monitored by the Permittee under this condition, shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

D.2.12 Water Wash Monitoring [40 CFR 64]

(a) Daily visual inspections shall be made on the water wash flood pans and water circulation associated with the PBL Paint Booth, exhausting to four (4) stacks, identified as BPR-1, BPR-2, BPR-JR and BRP-AP to verify the control system proper operation. A warning system shall be installed and operated to ensure that the water circulation pump is operational at all times when the PBL Paint Booth is in use. In addition, a red strobe light shall automatically be activated whenever the water circulation pump is down and once a day visual observation of the warning system shall be conducted. When a system warning is received, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) Semi-annual inspections shall be performed of the coating emissions from the PBL Paint Booth's stacks and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions or when evidence of overspray emission is observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.13 Record Keeping Requirements

(a) To document the compliance status with Conditions D.2.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.2.1. Records necessary to demonstrate the compliance status shall be available not later than 30 days ~~of~~ after the end of each compliance period.

(1) The VOC content of each coating material (as applied) and the VOC content of each solvent (including purge solvents and thinners) used less water.

(2) The solids content of each coating material used (as applied).

(3) The amount of coating material and solvent (including purge solvents and thinners) used on a daily basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvent.

(4) The volume weighted average VOC content of the coatings used (as applied) for each day.

(b) To document the compliance status with Conditions D.2.10 and D.2.11, the Permittee shall maintain the following records:

(1) Continuous temperature records (on a three-hour average basis) for the thermal incinerator and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(2) Records of the thermal incinerator shutdowns due to duct pressure or fan amperage deviations.

(3) Daily records of the duct pressure or fan amperage.

(c) To document the compliance status with Condition D.2.9, the Permittee shall maintain copies of the training program, and the list of trained operators. Training records shall be maintained on site or available not later than 1 hour for inspection by IDEM.

(d) To document the compliance status with Condition D.2.12, the Permittee shall maintain records of daily visual inspection of the water wash system, dates of any water wash warning system going off and corrective actions taken and log of semi-annual inspections of the PBL booth's stacks.

(e) To document the compliance status with Condition D.2.2(b) and (c), the Permittee shall maintain records of the vendor design guarantees for the two (2) 2.5 MMBtu/hr PBL Flash Zone Heaters.

(f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.2.14 Reporting Requirements

A monthly summary of the daily VOC content of the coatings used, based on a volume weighted average from the PBL Paint Booth, including the following information to document the compliance status with Condition D.2.1, shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35). The reports shall contain the following data for each operation, based on actual daily coating usage:

(1) Average coating VOC content in kg VOC/liter coating as applied;
(2) Average coating volume % solids as applied;
(3) Average actual solids transfer efficiency;
(4) Overall thermal incinerator control efficiency, reflecting capture and destruction efficiency;
(5) Average kg VOC/liter of applied solids, based on actual transfer efficiency; and
(6) Coating usage in liters.

When more than one coating has been averaged for compliance purposes, the average shall be determined on a weighted average by volume basis. All data necessary to verify weighted averages shall be included in the report.

SECTION D.3 SOURCE OPERATION CONDITIONS

Emissions Unit Description:

(g) One (1) plastic fascia paint line system, currently identified as PFPLS#2, approved in 2014 for physical modification and operational change as part of the proposed "2014 Increase in Capacity Project" for the plastic bumper coating operations. This will involve conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for Subaru vehicles, with an increase in capacity from 110,000 to 250,000 vehicles per year. PFPLS#2 will be renamed as Unit 005B, once production of non-Subaru vehicle ceases, which coats front and rear bumpers, and left and right side molding panels, with a maximum capacity of 150,118 units per year, constructed in 2006, and consisting of the following units:

(1) One (1) primer spray zone in the PFPLS#2 booth, to be renamed as Unit 005B, currently utilizing air atomized spray with robot method of application and automatic spray applicators with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack , identified as PB2(a). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(2) One (1) basecoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(b). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(3) One (1) clearcoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(c). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(4) Two (2) paint flash off areas for the primer zone and basecoat zone, exhausting to stack PB2(d), which includes natural gas-fired dry off ovens, with a total heat input capacity of 1.1 MMBtu/hr;

(5) Three (3) natural gas direct fired air intake units, each with a heat input capacity of 3.1 million British thermal units per hour (MMBtu/hr);

(6) One (1) fascia paint line natural gas-fired curing oven, with a heat input capacity of 2.5 MMBtu/hr, controlled by a catalytic/thermal oxidizer with a heat input capacity of 1.1 MMBtu/hr, exhausting to one (1) stack, identified as PB2(g). Approved in 2014 to increase oven length. Upon conversion of Unit 005B to Subaru vehicles, the catalytic/thermal oxidizer will be removed from service.

(7) One (1) paint mix room.

(8) One (1) Natural gas-fired burner with a heat input capacity of 3 MMBtu/hr approved in 2014 for construction.

(9) Six (6) back-up manual spray applicators approved in 2014 for construction.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

Conditions titled Non-Subaru Bumpers shall apply until non-Subaru bumpers ceases production. After which, conditions titled Subaru Bumpers shall take effect.

Non-Subaru Bumpers:

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2] [326 IAC 8-1-6]

The annual VOC usage, including wiping/cleaning solvents, and solvent purging to the plastic fascia paint line (PFPLS#2), and natural gas usage from the combustion devices associated with this fascia paint line and the 2.5 MMBtu/hr natural gas-fired dry off oven added to Topcoat #1 booth at the existing Topcoat, Unit 003 shall be limited such that the total potential to emit does not exceed 102.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(a) The thermal oxidizer used to control VOC emissions from the curing oven for the fascia paint line system shall achieve a minimum VOC destruction efficiency of 95% and a minimum overall control efficiency (capture efficiency x destruction efficiency) of 21%.

(b) The annual VOC usages of wiping/cleaning solvents and purge solvents minus the amount of VOC in the purge material collected shall be limited to 24.2 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This VOC limit shall account for the capture efficiency from the purge solvent capture systems used each time that any coating applicator in either the primer or the clearcoat spray zone is purged.

(c) The VOC emissions from the combustion devices associated with the plastic fascia paint line and the 2.5 MMBtu/hr natural gas-fired dry off oven added to the Topcoat #1 booth at the existing Topcoat, Unit 003 shall not exceed 5.5 pound per million cubic feet (lb/MMCF) of natural gas usage, and the total natural gas fuel usage shall not exceed 166.4 million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with the limits in this condition and Conditions D.1.3 and D.4.6 shall render the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable to the modification permitted in SSM 157-22702-00050.

Compliance with (a) and (b) of this condition shall also satisfy the requirements of 326 IAC 8-1-6.

Subaru Bumpers:

D.3.1.1 Prevention of Significant Deterioration BACT [326 IAC 2-2] [326 IAC 8-1-6]

Pursuant to 326 IAC 2-2-3 Best Available Control Technology (PSD BACT), for Unit 005B once non-Subaru bumpers ceases production shall be the following:

(a) The VOC emissions from Unit 005B of this section, as a daily volume weighted average of all primer coatings used shall not exceed 0.71 pounds per gallon.

(b) The VOC emissions from Unit 005B of this section, as a daily volume weighted average of all basecoat coatings shall not exceed 1.38 pounds per gallon.

(c) The VOC emissions from Unit 005B of this section, as a daily volume weighted average of all clearcoat coatings shall not exceed 4.09 pounds per gallon.

(d) Good work practices which includes the following:

(1) The use of robotic automatic spray applicators to minimize paint usage.

(2) The use of waterbased coatings for the primer, and basecoat applications.

(3) All paint mixing containers, other than day tanks equipped with continuous agitation systems, which contain organic VOC containing coatings and other materials shall have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

(4) Solvent-borne purge materials sprayed during paint line cleaning and color changes shall be directed into solvent collection containers. Documentation shall be maintained on-site to demonstrate how these materials are being directed and collected for both the solvent-borne and water-borne purge materials.

(5) Solvent collection containers shall be kept closed when not in use.

(6) Clean-up rags with solvent shall be stored in closed containers.

(7) VOC emissions shall be minimized during cleaning of storage, mixing, and conveying equipment.

(e) The VOC emissions from Plastic Bumper Coating Line, Unit 005B burner shall not exceed 0.0054 pound per million British thermal units (lb/MMBtu) and shall only combust natural gas.

Compliance with Conditions D.3.1.1(a) through (d) shall satisfy the requirements of 326 IAC 2-2 and 326 IAC 8-1-6. This condition shall apply once non-Subaru bumpers cease production.

Non-Subaru Bumpers:

D.3.2 Volatile Organic Compounds (VOC) Best Available Control Technology [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the Best Available Control Technology (BACT) for the plastic fascia paint line shall be the following:

(a) The exhausts from the fascia paint line curing oven shall be vented to a thermal oxidizer. The thermal oxidizer shall achieve a minimum VOC destruction efficiency of 95%.

(b) The fascia paint line shall comply with the following Best Available Control Technology limitations, for Volatile Organic Compounds (VOC):

(1) The daily VOC emissions, after control, as a volume weighted average of all primer coatings, shall be limited to less than 0.90 pound per gallon of coating (lbs/gal).

(2) The daily VOC emissions, after control, as a volume weighted average of all basecoat coatings, shall be limited to less than 1.15 lbs/gal of coating.

(3) The daily VOC emissions, after control, as a volume weighted average of all clearcoat coatings, shall be limited to less than 3.25 lbs/gal of coating.

(c) Good work practices which includes the following:

(1) The use of robotic automatic spray applicators to minimize paint usage.

(2) The use of waterbased coatings for the primer, and basecoat applications.

(3) All paint mixing containers, other than day tanks equipped with continuous agitation systems, which contain organic VOC containing coatings and other materials shall have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

(4) Solvent-borne purge materials sprayed during paint line cleaning and color changes shall be directed into solvent collection containers. Documentation shall be maintained on-site to demonstrate how these materials are being directed and collected for both the solvent-borne and water-borne purge materials.

(5) Solvent collection containers shall be kept closed when not in use.

(6) Clean-up rags with solvent shall be stored in closed containers.

(7) VOC emissions shall be minimized during cleaning of storage, mixing, and conveying equipment.

(d) The purge solvent capture systems shall have a minimum purge solvent capture efficiency of 80%. Collected purge materials (paint solids and solvent) from the primer and clearcoat applicators shall be retained in closed containers until recycled on-site or shipped offsite for recycling or disposal.

Compliance with this condition shall satisfy the requirements of 326 IAC 8-1-6.

Non-Subaru Bumpers:

D.3.3 Particulate Emissions [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), the particulate overspray emissions from the fascia paint line (PFPLS#2) shall be controlled by a water wash system and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

Subaru Bumpers:

D.3.3.1 Particulate Emissions [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), the particulate overspray emissions from Unit 005B shall be controlled by a water wash system and the Permittee shall operate the control device in accordance with the manufacturer's specifications. This condition shall apply once non-Subaru bumpers cease production.

Non-Subaru Bumpers and Subaru Bumpers:

D.3.4 Particulate Emissions from Sources of Indirect Heating [326 IAC 6-2-4]

(a) Pursuant to 326 IAC 6-2-4, the particulate emissions from the two (2) paint flash off areas for the primer zone and basecoat zone, (totaling 1.1 MMBtu/hr), shall each be limited to less than 0.313 pounds per MMBtu energy input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 121.1 MMBtu/hr).

(b) Pursuant to 326 IAC 6-2-4, the particulate emissions from the one (1) 2.5 MMBtu/hr fascia paint line natural gas-fired curing oven, shall not exceed 0.307 pounds per MMBtu energy input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 131.1 MMBtu/hr).

Non-Subaru Bumpers and Subaru Bumpers:

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan, is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-7-5(1)]

Non-Subaru Bumpers:

D.3.6 Volatile Organic Compounds (VOC)

(a) Compliance with the VOC content and usage limitations contained in Conditions D.3.1 and D.3.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedure specified in 326 IAC 8-1-4.

(b) In addition to the procedure in section (a) of this condition, compliance with the VOC limit for the solvent purging operation in Conditions D.3.1(b) and D.3.2 shall be determined through the following:

(1) Purge solvent usage and collection shall be monitored separately for the primer coating operations and clearcoat operations. For each of the primer and clearcoat coating systems, the Permittee shall install flow meters to monitor the volume of purge solvent delivered to the spray applicators, and the volume of the purge materials collected for recycling or disposal. The purge material collection/capture, as a percentage of purge solvent usage shall be determined on a monthly basis as follows:

$$\text{Purge Solvent Collection/Capture Efficiency} = \frac{S_c - R_{cs}}{P_u}$$

Where:

R_{cs} = Residual coating solids in the spray applicator;
S_c = Purge material collected (paint solids + solvent); and

P_u = Purge solvent usage.

(c) Compliance with Condition D.3.1(a), the capture efficiency shall be determined using the "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22) or guidelines in 40 CFR § 63.3165.

Non-Subaru Bumpers:

D.3.7 Prevention of Significant Deterioration (PSD) Minor Limits and VOC BACT Limits [326 IAC 2-2] [326 IAC 8-1-6]

(a) Compliance with the VOC limit in Condition D.3.1 shall be determined by using the following equation, which calculates the tons of VOC emissions per month, and adding the result to the calculated VOC emissions from the previous eleven months:

Total VOC Emissions (tons/month) = natural gas combustion units (heaters, curing oven, and oxidizer) VOC+ fascia paint line (wiping/cleaning solvent, and solvent purging) VOC

Where:

(1) Natural Gas Combustion VOC = Natural gas usage (MMCF/month) * 5.5 lb/MMCF

(2) Fascia Paint Line VOC =

$$\sum_{i=1}^{n} (\text{Booths } C_i \times S \times C \times P) + (\text{Oven } C_i \times (1-S) \times C_i \times P \times (1-DE)) + (P_u \times P_c \times P \times (1-_{cw}))$$

Where:

C_i is coating ($_i$) usage in gallon per unit from each booth in the Fascia Line;
S is the percentage booth split with oven (see spreadsheet page 2 of 12);
C is the coating (i) VOC content in pound per gallon;
P is the production in units per month;
Pu is the purge solvent usage in gallon per unit;
Pc is the purge VOC content in pound per gallon;
DE is the destruction efficiency of the oxidizer; and
Pcw is the percent purge materials collected/captured for waste recycle

(b) Compliance with the VOC emissions rate in Condition D.3.2 which applies after controls to emissions from the fascia paint line shall be determined by using the following equation:

$$\text{VOC emissions (lb VOC/gal)} = [\sum_{i=1}^{n} (Ci)(Ui)] \times [1 - (\text{Overall CE})]$$

Where:

i = 1 to n
C_i is the VOC content of each individual coating (i) of a coating type (Primer, Basecoat or Clearcoat) in pounds of VOC per day, as applied;
U_i is the usage rate of each individual coating (i) of a coating type (Primer, Basecoat or Clearcoat) in gallons per day;
n is the number of individual coatings of a particular coating type (Primer, Basecoat or Clearcoat); and

Overall CE is the overall control efficiency (capture efficiency x destruction efficiency) of the incinerator required in Condition D.3.1(a)

Subaru Bumpers:

D.3.7.1 Prevention of Significant Deterioration (PSD) VOC BACT Limits [326 IAC 2-2] [326 IAC 8-1-6]

(a) Compliance with the VOC content and usage limitations contained in Conditions D.3.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedure specified in 326 IAC 8-1-4.

(b) Compliance with the VOC limit in Condition D.3.1.1 shall be determined using the following equation:

$$\text{VOC emissions (lb VOC/gal)} = \left[\sum_{i=1}^{n} (C_i)(U_i)\right]$$

Where:

i = 1 ton
C_i is the VOC content of each individual coating (i) of a coating type (Primer, Basecoat or Clearcoat) in pounds of VOC per day, as applied;
U_i is the usage rate of each individual coating (i) of a coating type (Primer, basecoat or clearcoat) in gallons per day;
n is the number of individual coatings of a particular coating type (Primer, Basecoat or Clearcoat)

Non-Subaru Bumpers:

D.3.8 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 8-1-6]

In order to demonstrate compliance with Condition D.3.1, the Permittee shall perform VOC destruction efficiency and the control efficiency of the thermal oxidizer associated with the fascia paint line (PFPLS#2) utilizing methods as approved by the Commissioner at least once every two and one half (2.5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Non-Subaru Bumpers and Subaru Bumpers:

D.3.9 Operator Training Program

The Permittee shall implement an operator training program for the particulate control system for the fascia paint line (PFPLS#2), now Unit 005B:

(a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the water wash control system on the fascia paint line. All existing operators shall be trained upon permit issuance. All new operators shall be trained upon hiring or transfer.

(b) Training shall include proper flow of water through the water pan of the water wash system, and other factors that affect water wash capture efficiency (e.g., debris in the water pan), and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and

training records shall be maintained on site or available not later than 1 hour for inspection by IDEM.

(c) All operators shall be given refresher training annually.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

Non-Subaru Bumpers:

D.3.10 Thermal Oxidizer Temperature [326 IAC 2-7-5(3)] [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature, whenever the fascia paint line curing oven is in operation. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. Whenever the three (3) hour average temperature is below the three (3) hour average temperature established during the latest stack test that demonstrated compliance, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with the limits of Condition D.3.1(a), as approved by IDEM.

The instruments used for determining the temperature shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

Non-Subaru Bumpers:

D.3.11 Thermal Oxidizer Parametric Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

(a) The Permittee shall determine the appropriate range of duct pressure or fan amperage for the thermal oxidizer from the most recent valid stack test that demonstrates compliance with the limit set by Condition D.3.1(a) as approved by IDEM.

(b) The duct pressure or fan amperage, whichever is monitored by the Permittee under this condition shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

Non-Subaru Bumpers:

D.3.12 Record Keeping Requirements

(a) To document the compliance status with Conditions D.3.1 and D.3.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.3.1, and D.3.2. Records necessary to demonstrate the compliance status shall be available not later than 30 days after the end after each compliance period.

(1) The VOC content of each coating material (as applied).

(2) The solids content of each coating material used (as applied).

(3) The amount of coating material, wiping/cleaning solvent, purge solvents used on a monthly basis, and amount of purge material (paint solids + solvent) captured and recycled on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as wiping/cleaning solvents, and those used as purge.

(4) The volume weighted average VOC emitted per gallon of the coatings used (as applied) for each day.

(5) Records of the natural gas fuel usage from the combustion units associated with the fascia paint line (PFPLS#2), and from the 2.5 MMBtu/hr natural gas fired dry-off oven added to the existing Topcoat, Unit 003.

(b) To document the compliance status with Condition D.3.9, the Permittee shall maintain copies of the training program, and the list of trained operators. Training records shall be maintained on site or available not later than 1 hour after a request by IDEM for inspection.

(c) To document the compliance status with Condition D.3.10 and D.3.11, the Permittee shall maintain the following records:

(1) Continuous temperature records (on a three-hour average basis) for the thermal incinerator and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(2) Records of the thermal incinerator shutdowns due to duct pressure or fan amperage deviations.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

Subaru Bumpers:

D.3.12.1Record Keeping Requirements

Once non-Subaru bumpers ceases production, the Permittee shall be subject to the following:

(a) To document the compliance status with Condition D.3.1.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.3.1.1. Records necessary to demonstrate the compliance status shall be available not later than 30 days after the end after each compliance period.

(1) The VOC content of each coating material (as applied).

(2) The amount of coating materials including solvent added to coatings on a daily basis, and amount of purge material (paint solids + solvent) captured and recycled on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as wiping/cleaning solvents, and those used as purge.

(3) The volume weighted average VOC emitted per gallon of each type (i.e. primer, basecoat and clearcoat) of coatings used (as applied) for each day.

(b) To document the compliance status with Condition D.3.9, the Permittee shall maintain copies of the training program, and the list of trained operators. Training records shall be maintained on site or available not later than 1 hour after a request by IDEM for inspection.

Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

Non-Subaru Bumpers:

D.3.13 Reporting Requirements

A monthly summary of the VOC usage, including wiping/cleaning solvents, and solvent purging to the new plastic fascia paint line (PFPLS#2), and natural gas usage from the combustion devices associated with this fascia paint line and the 2.5 MMBtu/hr natural gas fired dry-off oven added to Topcoat #1 booth at the existing Topcoat, Unit 003 to document the compliance status with Condition D.3.1 shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

Subaru Bumpers:

D.3.13.1Reporting Requirements

A monthly summary of the information to document compliance with Condition D.3.1.1 shall be submitted quarterly to IDEM, OAQ using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Electrodeposition Coating of Vehicle Bodies (ED Coating Line), identified as Unit 001, with a capacity of 71 units per hour, constructed in 1989 and modified in 2009 and-2010. Approved in 2012 for modification to increase vehicle holding/storage area to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) ED Body Pretreatment area;

(2) One (1) ED Pretreatment Drying Oven, with one (1) insignificant natural gas indirect fired burner with a heat input capacity of 6.0 MMBtu/hr;

(3) One (1) insignificant boiler for paint temperature control, with a heat input capacity of 4.0 MMBtu/hr;

(4) Six (6) insignificant pretreatment boilers for warming water surrounding the ED Body Coating Tank, with a total heat input capacity of 9.0 MMBtu/hr;

(5) One (1) ED Body Coating Tank, utilizing dipping as the method of application;

(6) One (1) ED Body Oven (pretreatment drying oven) rated at 6.0 MMBtu/hr, with five (5) natural gas-fired burners (oven zones #1 through #5) each is rated at 2.5 MMBtu/hr, using a 2.5 MMBtu/hr natural gas-fired catalytic oxidizer (B-ED) as VOC control, and exhausting to one (1) stack, identified as B-ED Inc. (emissions from the entrance to, and exit from, the ED Body Oven use no controls and exhaust to one (1) stack, identified as B-ED Hood Exhaust);

(7) One (1) ED Body Cool Down area; and

(8) One (1) paint storage room.

(c) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, and modified in 2006, 2008, 2009, and 2010, consisting of the following units:

(1) One (1) Topcoat #1 Booth, approved in 2016 to replace existing spray applicators with automated electrostatic bell type spray applicators, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of 2.5 MMBtu/hr.

(2) One (1) Topcoat #1 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/h and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(3) One (1) Topcoat #1 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(4) One (1) Topcoat #1 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-1 Inc. (emissions from the entrance to and exit from the Topcoat #1 Oven are not controlled and exhaust to one (1) stack, identified as TC-1 Ex.). The oven is equipped with a purge exhaust stack;

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

(5) One (1) Topcoat #1 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-1 O.Cl;

(6) One (1) Topcoat #2 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to ten (10) stacks, identified as TC2-1 through TC2-10. One (1) natural gas-fired dry off oven between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr;

(7) One (1) Topcoat #2 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/hr and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(8) One (1) Topcoat #2 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(9) One (1) Topcoat #2 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-2 Inc. (emissions from the entrance to and exit from the Topcoat #2 Oven are not controlled and exhaust to one (1) stack, identified as TC-2 Ex.). The oven is equipped with a purge exhaust stack;

(10) One (1) Topcoat #2 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-2;

(11) One (1) Topcoat #3 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to five (5) stacks, identified as TUT-1 through TUT-5;

(12) One (1) Topcoat #3 Booth Preheat, with two (2) natural gas-fired burners (oven zones #1 and #2), one (1) with a heat input capacity of 1.5 MMBtu/hr and one (1) with a heat input capacity of 2.5 MMBtu/hr;

(13) One (1) Topcoat #3 Booth Reheat, with one (1) insignificant 1.5 MMBtu/hr natural gas-fired burner (oven zone #3);

(14) One (1) Topcoat #3 Booth Oven, approved in 2013 for modification, with four (4) insignificant natural gas-fired burners with a total maximum heat input capacity of 8.55 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2. The oven is equipped with a purge exhaust stack;

(15) One (1) Topcoat #3 Booth Cool Down area;

(16) One (1) Topcoat #3 Booth natural gas indirect fired flash zone heater between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr, permitted in 2010 for construction; and

(17) Main paint mix room.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

(d) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of **77** units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to include alterations to the conveyor system that will add storage capacity to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) Intermediate Working Stage burner (oven zone #1), with a heat input capacity of 2.5 MMBtu/hr;

(2) One (1) Intermediate Coating Booth, utilizing, two (2) robots, for the application of anti-chip (ACC), two (2) manual air assisted spray guns for the application of primer on inner doors for certain colors, followed by the exterior robot e-stat painting process, using a water wash as particulate control, and exhausting to six (6) stacks, identified as SUR-2 through SUR-7;

(3) One (1) Intermediate Booth Preheat (oven zones #2 and #3), with two (2) natural gas-fired burners, each with a heat input capacity of 2.5 MMBtu/hr;

(4) One (1) Intermediate Booth Reheat burner (oven zone #4), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(5) One (1) Intermediate Coating Oven, with five (5) insignificant natural gas direct fired burners totaling 12.42 MMBtu/hr, using a 1.0 MMBtu/hr natural gas-fired catalytic incinerator (SUR) as VOC control, and exhausting to one (1) stack, identified as SUR-1 (emissions from the entrance to and exit from the Intermediate Coating Oven use no controls and exhaust to one (1) stack, identified as Surfacer Hood Exhaust);

(6) One (1) Intermediate Cool Down area, using no controls, and exhausting to one (1) stack, identified as Surfacer Cooling; and

(7) Main paint mix room.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, PSD/SSM No. 157-29566-00050, 326 IAC 2-2-3, BACT for VOC for the facilities described in this section is the following:

(a) The daily VOC emissions from each facility shall be limited to less than the corresponding limits in the following table. Compliance with these limits shall be demonstrated pursuant to Condition D.4.9:

Facility	lb VOC/gal applied solids	kg VOC/liter applied solids
ED Body Coating Line (ED Dip/Rinse Tanks and Curing Oven)	0.40[a]	0.062[a]
Topcoat booths (Topcoat #1 Booth, Topcoat #2 Booth)	12.3[b]	1.47[b]
Topcoat #3 Booth	10.6[c]	1.27[c]
Intermediate Coating Booth	8.76[d]	1.05[d]

[a] Coatings used at the ED Coating Line on a daily basis
[b] Volume Weighted average of all Topcoat coatings used in Booths #1 and #2.
[c] Volume Weighted average of all Topcoat coatings used in Booth #3.
[d] Volume Weighted average of all Intermediate coatings.

(b) The incinerator used to control VOC emissions from the Intermediate Coating Oven shall achieve a minimum VOC destruction efficiency of 90%.

The VOC emissions from the Topcoat #1, Topcoat #2 and Topcoat #3 Ovens shall be vented to the regenerative thermal oxidizer (RTO-TC123) with a minimum VOC destruction efficiency of 90 percent.

The VOC emissions from the ED Curing Oven shall be vented to the existing Catalytic Incinerator with a VOC destruction efficiency of 90 percent, and a minimum capture efficiency of 70% for the entire ED Coating Line (ED Dip/Rinse Tanks and Curing Oven).

(c) The following good operating practices shall be observed to minimize VOC emissions from the Topcoat #3 Booth:

(1) Minimization of spillage of coating materials,
(2) Minimization of major paint repairs,
(3) Cleanup rags saturated with solvent shall be stored, transported and disposed in containers that are tightly closed, and
(4) Storage containers used to store VOC- and/or HAP- containing materials shall be kept covered when not in use.

(d) Pretreatment Cleaning shall utilize only VOC free detergents, conditioners, and rinses in the body pre-treatment cleaning operations.

(e) Pertaining to purge solvent use:

(1) Purge solvent capture systems will be utilized each time that any coating application equipment is purged. The purge solvent capture systems shall have a minimum overall capture efficiency of at least eighty percent (80%). Collected purge solvent shall be retained in closed conveyances to the Permittee's spent purge solvent storage tank or in closed containers until such time as they are shipped offsite for disposal or recycling.

(2) Block painting will be utilized whenever possible to minimize color changes and the resulting purge.

(f) The VOC emissions from the one (1) 2.5 MMBtu/hr Topcoat #3 flash zone heater shall be limited to less than 0.0055 pound per million British thermal units (lb/MMBtu).

(g) The Permittee shall perform good combustion practices for the one (1) 2.5 MMBtu/hr Topcoat #3 flash zone heater and utilize natural gas only for fuel.

Compliance with these limitations, and those contained in Conditions D.1.3, D.2.1, D.5.1, D.6.1, D.7.1, and D.8.1, shall satisfy the requirements of 326 IAC 2-2.

D.4.2 Prevention of Significant Deterioration - Best Available Control Technology for Nitrogen Oxides (NOx) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for NOx for the natural gas combustion equipment described in this section is the following:

(a) NOx emissions from the following facilities:

(1) Shall be limited to less than 0.10 pounds per million Btu heat input for each facility listed as follows:

(A) the Intermediate Working Stage burner;

(B) the three (3) Topcoat #1 Booth Preheat burners;

(C) the three (3) Topcoat #2 Booth Preheat burners;

(D) the two (2) Topcoat #3 Booth Preheat burners;

(E) the insignificant ED Pretreatment Drying Oven burner;

(F) the insignificant ED Paint Temperature Control boiler;

(G) the six (6) insignificant ED Pretreatment boilers;

(H) the five (5) insignificant ED Body Oven burner;

(I) the insignificant ED Body Oven incinerator;

(J) the five (5) insignificant Intermediate Oven burners;

(K) the three (3) insignificant Topcoat #1 Booth Reheat burners;

(L) the four (4) insignificant Topcoat #1 Oven burners;

(M) the three (3) insignificant Topcoat #2 Booth Reheat burner;

(N) the four (4) insignificant Topcoat #2 Oven burners;

(O) the insignificant Topcoat #3 Booth Reheat burner;

(P) the four (4) insignificant Topcoat #3 Booth Oven burners;

(2) Shall be limited to less than 0.12 pounds per million Btu heat input for each facility listed as follows:

(A) the two (2) Intermediate Booth Preheat burners;

(B) the two (2) insignificant Intermediate (Surfacer) Booth Reheat burner;

(C) the insignificant Intermediate (Surfacer) Oven incinerator;

(b) All combustion operations listed above shall use low-NOx natural gas burners.

Compliance with these limitations, and those contained in Conditions D.2.2, D.6.2, and D.8.2, shall satisfy the requirements of 326 IAC 2-2.

D.4.3 Particulate Emissions from Sources of Indirect Heating [326 IAC 6-2-4]

(a) Pursuant to 326 IAC 6-2-4, the particulate emissions from the six (6) insignificant - ED Pretreatment boilers (totaling 9.0 MMBtu/hr), and the one (1) insignificant 4.0 MMBtu/hr ED Paint Temperature Control boiler shall each be limited to less than 0.314 pounds per MMBtu energy input.

The limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 120 MMBtu/hr).

(a) Pursuant to 326 IAC 6-2-4, the particulate emissions from the three (3) Topcoat #3 oven zone #1 and oven zone #3 heaters each rated at 1.5 MMBtu/hr and oven zone #2 rated at 2.5 MMBtu/hr shall each not exceed 0.314 lb/MMBtu energy input.

(c) Pursuant to 326 IAC 6-2-4, the particulate emissions from the three (3) Topcoat #2 oven zone #1 and oven zone #3 heaters each rated at 2.5 MMBtu/hr and oven zone #2 rated at 3.5 MMBtu/hr shall each not exceed 0.314 lb/MMBtu energy input

(d) Pursuant to 326 IAC 6-2-4, the particulate emissions from the three (3) Topcoat #1 oven zone #1 and oven zone #3 heaters each rated at 2.5 MMBtu/hr and oven zone #2 rated at 3.5 MMBtu/hr shall each not exceed 0.314 lb/MMBtu energy input

(e) Pursuant to 326 IAC 6-2-4, the particulate emissions from the four (4) Intermediate (Surfacer) ovens with zone #1 through oven zone #3 heaters each rated at 2.5 MMBtu/hr and oven zone #4 with two (2) burners rated at total capacity of 2.5 MMBtu/hr shall each not exceed 0.314 lb/MMBtu energy input

The limitations are based on the following equation

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 120 MBtu/hr).

(f) Pursuant to 326 IAC 6-2-4, the particulate emissions from the Topcoat #3 flash zone heater rated at 2.5 MMBtu/hr shall not exceed 0.307 lb/MMBtu energy input.

The limitation is based on the following equation

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 131.1 MMBtu/hr).

D.4.4 Volatile Organic Compound (VOC) Limitations [326 IAC 8-2-2] [326 IAC 8-1-2]

(a) The Permittee shall not allow the discharge of VOC into the atmosphere in excess of the following limits based on an actual measured transfer efficiency higher than 30%, in lieu of the VOC emission limitations in 326 IAC 8-2-2:

(1) The daily VOC emissions from the Topcoat booths (Topcoat #1 Booth, Topcoat #2 Booth, and Topcoat #3 Booth) shall not exceed 15.1 pounds of VOC per gallon of applied solids (1.83 kilograms of VOC per liter of applied solids). This limit applies to the weighted average of all Topcoat coatings.

(2) The daily VOC emissions from the Intermediate Coating Booth shall not exceed 15.1 pounds of VOC per gallon of applied solids (1.83 kilograms of VOC per liter of applied solids). This limit applies to the weighted average of all Intermediate coatings.

(b) Pursuant to 326 IAC 8-1-2(a), the VOC emission limitations in paragraph (a) of this condition shall be achieved through one (1) or any combination of the following: use of catalytic incinerator or regenerative thermal oxidizer use of higher solids (low solvent) coatings, and/or waterborne coatings.

Compliance with the VOC emission limits in paragraph (a) of this condition shall be determined by the equation in D.4.9(a).

(c) Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the incinerators (RTO-TC123 and SUR) shall each be no less than the equivalent overall efficiency calculated by the following equation:

$$O = \frac{(V - E)}{V} * 100$$

Where:

V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied;
E = Equivalent emission limit (15.1 pounds of VOC per gallon of applied solids);
O = Equivalent overall efficiency of the capture system and control device as a percentage.

D.4.5 Volatile Organic Compound (VOC) Limitations [326 IAC 8-2-2]

Pursuant to 326 IAC 8-2-2, the daily VOC emissions from the ED Body Coating Tank shall not exceed 1.17 pounds of VOC per gallon of coating less water (0.14 kilograms of VOC per liter of coating less water) (site-specific RACT limit established pursuant to 325 IAC 8-1-5 (Petition for alternate controls)).

Compliance with this limit shall be demonstrated pursuant to Condition D.4.9.

D.4.6 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

The annual VOC input, including cleanup solvents, to the modified Topcoat System, identified as Unit 003 shall be limited such that the VOC emissions do not exceed 393 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

Compliance with this VOC limit and the VOC limits in Conditions D.1.3 and D.3.5 shall render 326 IAC 2-2, Prevention of Significant Deterioration not applicable to the source modification permitted in SSM 157-22702-00050.

D.4.7 Particulate Emissions [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate emissions from the Topcoat booths (Topcoat #1 Booth, Topcoat #2 Booth, and Topcoat #3 Booth) and the Intermediate Coating Booth shall be controlled by water washes and the Permittee shall operate the control devices in accordance with manufacturer's specifications.

D.4.8 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for this facility and their respective control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-7-5(1)]

D.4.9 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 2-2]

(a) Compliance with the VOC emission limits in Conditions D.4.1, D.4.4 and D.4.5 shall be determined with the following equations (as applicable):

$$\text{VOC emissions (lb VOC/gal applied solids)} = \left[\sum_{i=1}^{n} (C_i \times U_i) \Big/ \sum_{i=1}^{n} (S_i \times TE)\right] \times [1 - (CE \times DE)]$$

Where:

C_i is the VOC content of the coating ($_i$) in pounds of VOC per gallon of coating, as applied;
U_i is the usage rate of the coating ($_i$) in gallons per day;
S_i is the usage rate of coating ($_i$) solids in gallons per day;
TE is the transfer efficiency of the applicator;
CE is the minimum capture efficiency of the incinerator; and
DE is the minimum destruction efficiency of the incinerator required in Condition D.4.1(b).

Or, if the emission limit is in units of pounds of VOC per gallon of coating less water:

$$\text{VOC emissions (lb VOC/gal coating less water)} = \left[\sum_{i=1}^{n} (C_i \times U_i) \Big/ \sum_{i=1}^{n} U\right] \times [1 - (CE \times DE)]$$

Where:

C_i is the VOC content of the coating ($_i$) in pounds of VOC per gallon of coating less water, as applied;
U_i is the usage rate of the coating ($_i$) in gallons per day;
U total usage rate from all coatings (from 1 to n)
CE is the minimum capture efficiency of the incinerator; and
DE is the minimum destruction efficiency of the incinerator required in Condition D.4.1(b).

(b) Compliance with the VOC limit in Condition D.4.6 shall be determined by using the following equation, which calculates the tons of VOC emissions per month, and adding the result to the calculated VOC emissions from the previous eleven months:

Topcoat VOC = (U x C) x (1-(CE x DE))

Where:

U is the coating usage in tons/month;
C is the VOC content of the coating;
CE is the minimum capture efficiency of the incinerator; and
DE is the minimum destruction efficiency of the oxidizer required in D.4.1(b).

(c) Compliance with Condition D.4.1(b) the capture efficiency for the ED Coating Line shall be determined using the procedure in 40 CFR Part 60, Subpart MM – NSPS for Automobile and Light-Duty Truck Surface Coating Operations.

D.4.10 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

(a) Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the incinerators at all times the respective facilities are in operation to ensure compliance with Conditions D.4.1 and D.4.4.

(b) The incinerators shall be operated such that they achieve the minimum capture and destruction efficiencies specified in Condition D.4.1.

D.4.11 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within sixty (60) days after the startup operation of the regenerative thermal oxidizer (RTO-TC123) associated with Topcoat #1 Oven, Topcoat #2 Oven, and Topcoat #3 Oven, the Permittee shall perform VOC testing to verify its VOC destruction efficiency. Performance testing shall utilize methods as approved by the Commissioner and shall be performed at least once every two and one half (2.5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) The Permittee shall perform VOC testing to verify VOC destruction efficiencies of the catalytic incinerator SUR controlling the Intermediate Coating Oven. The Permittee shall perform VOC testing to verify VOC capture efficiency of the ED Coating Line ED Dip/Rinse Tanks and Curing Oven capture system and destruction efficiency of the catalytic incinerator (B-ED) associated with the ED Body Oven. Performance testing shall utilize methods as approved by the Commissioner and shall be performed at least once every two and one half (2.5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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D.4.12 Operator Training Program

The Permittee shall implement an operator training program.

(a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the water wash control systems on the Topcoat #1, Topcoat #2, Topcoat #3, and Intermediate Coating lines. All existing operators shall be trained upon permit issuance. All new operators shall be trained upon hiring or transfer.

(b) Training shall include proper flow of water through the water pan of the water wash system, and other factors that affect water pan capture efficiency (e.g., debris in the water pans), and troubleshooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available not later than 1 hour for inspection by IDEM.

(b) All operators shall be given refresher training annually.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.13 Regenerative Thermal Oxidizer and Catalytic Incinerators Temperature [326 IAC 2-7-5(3)] [40 CFR 64]

a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring the temperature at the inlet to the catalyst bed of the catalytic incinerator whenever any of the ED Body Oven and Intermediate Coating Oven is in operation to control the VOC emissions from the ED Body Oven and Intermediate Coating Oven. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. Whenever the three (3) hour average inlet temperature to the catalyst bed of each catalytic incinerator is below the three (3) hour average temperature established during the latest stack test that demonstrated compliance, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) A continuous monitoring system shall be calibrated, maintained, and operated for measuring the operating temperature of the regenerative thermal oxidizer (RTO-TC123) whenever any of the Topcoat #1 Oven, Topcoat #2 Oven, or Topcoat #3 Oven, is in operation to control VOC emissions from these ovens. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. Whenever the three (3) hour average operating temperature of this RTO is below the three (3) hour average temperature established during the latest stack test that demonstrated compliance, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(c) The Permittee shall determine the three (3) hour average temperature at the inlet to the catalyst beds of each catalytic incinerator (B-ED and SUR) and the three (3) hour average operating temperature of the regenerative thermal oxidizer (RTO-TC123) from the most recent valid performance test that demonstrates compliance with the limits in Conditions D.4.1, and D.4.4 as approved by IDEM.

The instruments used for determining the temperature shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.4.14 Parametric Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage for each catalytic incinerator (B-ED and SUR) and regenerative thermal oxidizer (RTO-TC123) from the most recent valid stack test that demonstrates compliance with the permit limits for VOC destruction efficiency and control efficiency as approved by IDEM.

(b) The duct pressure or fan amperage, whichever is monitored by the Permittee under this condition, shall be observed at least once per day when the thermal or catalytic incinerator is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

D.4.15 Water Wash Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

(a) Daily visual inspections shall be made on each water wash flood pans and water circulation associated with the Topcoat #1 Booth, exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10; Topcoat #2 Booth, exhausting to ten (10) stacks, identified as TC2-1 through TC2-10 and Topcoat #3 Booth, exhausting to five (5) stacks, identified as TUT-1 through TUT-5 to verify the control system proper operation. A warning system shall be installed and operated to ensure that the water circulation pump is operational at all times when any of the following emission units are in operation: Topcoat #1 Booth, Topcoat #2 Booth, and Topcoat #3 Booth. In addition, a red strobe light shall automatically be activated whenever the water circulation pump is down and once a day visual observation of the warning system shall be conducted. When a system warning is received, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) Semi-annual inspections shall be performed of the coating emissions from the Topcoat #1 Booth stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10; Topcoat #2 Booth stacks, identified as TC2-1 through TC2-10 and Topcoat #3 Booth stacks, identified as TUT-1 through TUT-5 and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions or when evidence of overspray emission is observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.16 Record Keeping Requirements

(a) To document the compliance status with Conditions D.4.1, D.4.4, D.4.5, and D.4.6, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.4.1, D.4.4, D.4.5, and D.4.6, and the compliance determination requirements established in Condition D.4.9. Records necessary to demonstrate the compliance status shall be available not later than 30 days after the end of each compliance period.

(1) The VOC content of each coating material (as applied) and the VOC content of each solvent (including purge solvents and thinners) used less water.

(2) The VOC content of each coating material used in the ED Body Coating Tank, as applied, less water.

(3) The solids content of each coating material used (as applied).

(4) The amount of coating material and solvent (including purge solvents and thinners) used on a daily basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvent.

(5) The volume weighted average VOC content of the coatings used (as applied) for each day.

(b) To document the compliance status with Conditions D.4.13 and D.4.14, the Permittee shall maintain the following records:

(1) The continuous temperature records (on a three-hour average basis) for the inlet temperature to the catalyst beds of each catalytic incinerator (B-ED and SUR), and the continuous operating temperature records (on a three-hour average basis) for the regenerative thermal oxidizer (RTO-TC123) used to demonstrate compliance during the most recent compliant stack test.

(2) Records of any catalytic incinerator or regenerative thermal oxidizer shutdowns due to duct pressure or fan amperage deviations.

(3) Daily records of the duct pressure or fan amperage for the catalytic incinerators and regenerative thermal oxidizer.

(c) To document the compliance status with Condition D.4.12, the Permittee shall maintain copies of the training program, and the list of trained operators. Training records shall be maintained on site or available not later than 1 hour after request for inspection by IDEM.

(d) To document the compliance status with Condition D.4.15, the Permittee shall maintain records of daily visual inspection of the water wash system, dates of any water wash warning system going off and corrective actions taken and log of semi-annual inspections of the Topcoat #1 Booth stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10; Topcoat #2 Booth stacks, identified as TC2-1 through TC2-10 and Topcoat #3 Booth stacks, identified as TUT-1 through TUT.

(e) To document the compliance status with Condition D.4.1(f) and (g), the Permittee shall maintain records of the vendor design guarantees for the one (1) 2.5 MMBtu/hr Topcoat #3 flash zone heater.

(f) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

D.4.17 Reporting Requirements

A monthly summary of the daily VOC content of the coatings used from the ED Coating Line, Topcoat #1 Booth, Topcoat #2 Booth, Topcoat #3 Booth and Intermediate Coating Booth, including the information to document the compliance status with Condition D.4.1 and a monthly summary of the monthly VOC usage to document the compliance status with Condition D.4.6, shall be both submitted to IDEM, OAQ not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(h) Final Repair (Touchup) painting, identified as Unit 007, constructed in 1989 and approved in 2014 to increase capacity from 10 units per hour to 15 units per hour, and including the following equipment:

(1) One (1) Touchup IPC Booth, located in the In-Process Control area, utilizing the air atomization method of spraying.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for VOC for the Final Repair (Touchup) Operation is the following:

(a) The daily VOC emissions from the Touchup IPC Booth shall not exceed 4.84 pounds of VOC per gallon of coating less water (0.58 kilograms of VOC per liter of coating less water). This limit applies to the weighted average of all Final Repair coatings and solvents.

Compliance with this limit shall be determined pursuant to Condition D.5.4.

(b) Pretreatment Cleaning shall utilize only VOC free detergents, conditioners, and rinses in the body pre-treatment cleaning operations.

(c) Pertaining to purge solvent use:

(1) Purge solvent capture systems will be utilized each time that any coating application equipment is purged. The purge solvent capture systems shall have a minimum overall capture efficiency of at least eighty percent (80%). Collected purge solvent shall be retained in closed conveyances to the Permittee's purge solvent reclamation system for on-site reclamation and recycling or in closed containers until such time as they are shipped offsite for disposal or recycling.

(2) Block painting will be utilized whenever possible to minimize color changes and the resulting purge.

Compliance with these limitations, and those contained in Conditions D.1.3, D.2.1, D.4.1, D.6.1, D.7.1, and D.8.1 shall satisfy the requirements of 326 IAC 2-2.

D.5.2 Volatile Organic Compound (VOC) Limitations [326 IAC 8-2-2]

Pursuant to 326 IAC 8-2-2, the daily VOC emissions from the Touchup IPC Booth shall not exceed 4.84 pounds of VOC per gallon of coating less water (0.58 kilograms of VOC per liter of coating less water). This limit applies to the weighted average of all Final Repair coatings and solvents.

Compliance with this limit shall be determined pursuant to Condition D.5.4.

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their respective control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-7-5(1)]

D.5.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Compliance with the VOC emission limits in Conditions D.5.1 and D.5.2 shall be determined with the following equation:

$$\text{VOC emissions (lb VOC/gal coating less water)} = [\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} U]$$

Where:

C_i is the VOC content of the coating ($_i$) in pounds of VOC per gallon of coating less water, as applied; and
U_i is the usage rate of the coating ($_i$) in gallons per day.
U total usage rate from all coatings (from 1 to n)

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.5 Record Keeping Requirements

(a) To document the compliance status with Conditions D.5.1 and D.5.2 the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance the VOC emission limits established in Conditions D.5.1 and D.5.2. Records necessary to demonstrate compliance shall be available not later than 30 days after the end of each compliance period.

(1) The VOC content of each coating material (as applied, less water) and the VOC content of each solvent (including purge solvents and thinners) used less water.

(2) The amount of coating material and solvent (including purge solvents and thinners) used on a daily basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvent.

(3) The volume weighted average VOC content of the coatings used (as applied) for each day.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.5.6 Reporting Requirements

A monthly summary of the daily VOC and coating usage from the Touchup IPC Booth to document the compliance status with Conditions D.5.1 and D.5.2, shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35). The reports shall contain the following data for each operation based on actual daily coating usage:

(1) Average coating VOC content in lbs VOC/gal coating minus water

(2) Coating usage in gallons.

When more than one coating has been averaged for compliance purposes, the average shall be determined on a weighted average by volume basis. All data necessary to verify weighted averages shall be included in the report.

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) Sealing and PVC Undercoating Line, identified as Unit 002, with a capacity of 77 units per hour, constructed in 1989 and approved for modification in 2012, consisting of the following units:

(1) One (1) PVC Coating Booth #1, constructed in 1989, utilizing airless spray application system and pedestal robotic spray system, using a dry filter as particulate matter control, approved in 2012 for modification to add four (4) additional spray coating application systems, and exhausting to one (1) stack, identified as PVC-1-2;

(2) One (1) PVC Coating Booth #1 Preheat (oven zone #1), constructed in 1989, with one (1) natural gas indirect fired burner with a heat input capacity of 3.5 MMBtu/hr;

(3) One (1) PVC Coating Booth #2, constructed in 1999 and modified in 2006, utilizing the airless spray method of application, using a dry filter as particulate control, approved in 2012 for modification to add two (2) additional spray coating application systems and exhausting to one (1) stack, identified as PVC-Booth 2;

(4) One (1) PVC Coating Booth #2 Preheat (oven zone #2), constructed in 1999, with one (1) natural gas direct fired burner with a heat capacity of 3.5 MMBtu/hr;

(5) One (1) PVC Seal Oven, constructed in 1989, with two (2) insignificant natural gas-fired burners totaling 6.94 MMBtu/hr, using no controls, and exhausting to one (1) stack, identified as PVC-Oven Exhaust;

(6) One (1) PVC Cool Down area, constructed in 1989, using no controls, and exhausting to one (1) stack, identified as PVC Cooling; and

(7) One (1) Sound Deadener Operation approved in 2010 for construction, using no controls.

(f) Anticorrosion Coating, identified as Unit 006, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to add two (2) spray coating systems at the Black Coat and Wax Booth to allow more vehicles coated hourly, including the following equipment:

(1) One (1) Black Coat and Wax Booth, utilizing the air atomized and air-assisted airless methods of spraying, using a dry filter as particulate matter control, exhausting to BCW Stack;

(2) One (1) Black Coat and Wax Booth natural gas direct fired burner, with a heat input capacity of 24.0 MMBtu/hr;

(3) One (1) Anticorrosion Coating Booth, utilizing the air-assisted method of spraying, using a dry filter as particulate control, exhausting to Anticorrosion Stack; and

(4) One (1) insignificant Anticorrosion Coating natural gas-fired burner.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOC) Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989; PSD/SSM 157-29566-00050, issued on December 22, 2010 and 326 IAC 2-2-3, BACT for VOC for the facilities described in this section is the following:

(a) The daily VOC emissions from the Sealing and PVC Undercoating Line shall not exceed the corresponding limits in the following table. Compliance with these limits shall be determined pursuant to Condition D.6.8:

Facility	lb VOC/gal applied coating solids (lb/gacs)	kg VOC/liter applied coating solids (kg/lacs)
Sealing and PVC Undercoating Line, identified as Unit 002 (PVC Coating Booths #1 and #2)	0.30	0.036

(b) The daily VOC emissions from the Black and Wax Booth and the Anticorrosion Coating Booth shall not exceed the corresponding limits in the following table. Compliance with these limits shall be determined pursuant to Condition D.6.8:

Facility	lb VOC/gal coating solids (lb/gcs)	kg VOC/liter coating solids (kg/lcs)
Before Vehicle Assembly		
Black Coat and Wax Booth (black phthalic resin application)	17.9	2.14
Black Coat and Wax Booth (inner panel wax application)	6.43	0.77
After Vehicle Assembly		
Anticorrosion Coating Booth (underfloor wax application)	3.59	0.43

(c) The following spray application methods must be used whenever applying the following coatings:

(1) PVC Undercoat - Airless
(in PVC Coating Booths #1 and #2)

(2) Underfloor Wax - Airless
(in Anticorrosion Booth)

(3) Inner Panel Wax - Air or Airless with minimum transfer
(in Black Coat and Wax Booth) efficiency of 80%

(d) Pretreatment Cleaning shall utilize only VOC free detergents, conditioners, and rinses in the body pre-treatment cleaning operations.

(e) Pertaining to purge solvent use:

(1) Purge solvent capture systems will be utilized each time that any coating application equipment is purged. The purge solvent capture systems shall

have a minimum overall capture efficiency of at least eighty percent (80%). Collected purge solvent shall be retained in closed conveyances to the Permittee's spent purge solvent storage tank or in closed containers until such time as they are shipped offsite for disposal or recycling.

(2) Block painting will be utilized whenever possible to minimize color changes and the resulting purge.

Compliance with these limitations, and those contained in Conditions D.1.3, D.2.1, D.4.1, D.5.1, D.7.1, and D.8.1 shall satisfy the requirements of 326 IAC 2-2.

D.6.2 Prevention of Significant Deterioration - Best Available Control Technology for Nitrogen Oxides (NOx) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for NOx for the natural gas combustion facilities described in this section is the following:

(a) The NOx emissions from the PVC Coating Booths #1 and #2 Preheat Burners, the Black Coat and Wax Coat Booth burner, the two (2) insignificant PVC Seal Oven burners, and the insignificant Anticorrosion Booth burner shall not exceed 0.10 pounds per million Btu (lb/MMBtu) heat input each; and

(b) All combustion facilities listed in this section shall use low-NOx natural gas burners.

Compliance with these limitations, and those contained in Conditions D.2.2, D.4.2, and D.8.2 shall satisfy the requirements of 326 IAC 2-2.

D.6.3 Volatile Organic Compound (VOC) Best Available Control Technology Limitations [326 IAC 2-2] [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 2-2-3 (Control Technology Review Requirements) and PSD 157-31885-00050, and 326 IAC 8-2-9, the daily VOC emissions from Anticorrosion Coating (Black Coat and Wax Booth and Anticorrosion Coating Booth) shall not exceed 3.5 pounds of VOC per gallon of coating less water (0.42 kilograms of VOC per liter of coating less water) for materials that are air dried or forced warm air dried at temperatures up to ninety (90) degrees Celsius (one hundred ninety-four (194) degrees Fahrenheit). This limit applies to the weighted average of all Anticorrosion coatings.

(b) Pursuant to 326 IAC 8-2-9, the Permittee shall not allow the discharge of VOC into the atmosphere in excess of the following limits:

(1) The daily VOC emissions from Sealing and PVC Coating (PVC Coating Booth #1 and PVC Coating Booth #2 and Sound deadener operation) shall not exceed 3.5 pounds of VOC per gallon of coating less water (0.42 kilograms of VOC per liter of coating less water).

Compliance with these limits shall be determined pursuant to Condition D.6.8.

D.6.4 Volatile Organic Compound (VOC) Limitations, Clean-up Requirements [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9(f), work practices shall be used to minimize VOC emissions from mixing operations, storage tanks, and other containers, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:

(a) Store all VOC containing coatings, thinners, coating related waste, and cleaning materials in closed containers.

(b) Ensure that mixing and storage containers used for VOC containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials.

(c) Minimize spills of VOC containing coatings, thinners, coating related waste, and cleaning materials.

(d) Convey VOC containing coatings, thinners, coating related waste, and cleaning materials from one (1) location to another in closed containers or pipes.

(e) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.

D.6.5 Particulate Emissions [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate emissions from the Black Coat and Wax Booth, PVC Coating Booth #1, PVC Coating Booth #2 and Anticorrosion Coating operations shall be controlled by dry filters. The Permittee shall operate the control devices in accordance with manufacturer's specifications.

D.6.6 Particulate Emissions from Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the particulate emissions from the two (2) PVC oven zones #1 and #2 each with rated capacity of 3.5 MMBtu/hr shall each not exceed 0.314 pounds per MMBtu energy input.

The limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 120 MMBtu/hr).

D.6.7 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan, is required for these facilities and their respective control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-7-5(1)]

D.6.8 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Compliance with the VOC emission limits in Conditions D.6.1 and D.6.3 shall be determined with the following equations (as applicable):

$$\text{VOC emissions (lb VOC/gal applied coating solids)} = \left[\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} U \right]$$

Where:

C_i is the VOC content of the coating ($_i$) in pounds of VOC per gallon of coating solids as applied; and
U_i is the usage rate of the coating (i) in gallons per day.
U total usage rate from all coatings (from 1 to n)

Or, if the emission limit is in units of pounds of VOC per gallon of coating less water:

$$\text{VOC emissions (lb VOC/gal coating less water)} = [\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} U]$$

Where:

C_i is the VOC content of the coating ($_i$) in pounds of VOC per gallon of coating less water as applied; and
Ui is the usage rate of the coating (i) in gallons per day.
U total usage rate from all coatings (from 1 to n)

Or, if the emission limit is in units of pounds of VOC per gallon of applied coating solids (lb/gacs)

$$DWA = \frac{\sum_{i=1}^{n} (C_i)(U_i)}{\sum_{i=1}^{n} (S_i \times TE)}$$

where:

DWA = daily calculated volume weighted average emissions in pounds per gallon coating solids;
C = VOC content of coating i, lb VOC/gal;
U = actual coating i usage, gal/day;
S = volume of solids in coating i consumed, gal/day;
TE = transfer efficiency of the applicator, determine using the Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22); and
n = no. of coatings used during the day.

D.6.9 Operator Training Program

The Permittee shall implement an operator training program.

(a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the dry filters on the PVC Coating Booth #1, PVC Coating Booth #2, Black Coat and Wax Booth Coating operations and Anticorrosion Coating operations. All existing operators shall be trained upon permit issuance. All new operators shall be trained upon hiring or transfer.

(b) The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available not later than 1 hour after request for inspection by IDEM.

(c) All operators shall be given refresher training annually.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.10 Dry Filters Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

Dry filters shall be operated whenever the PVC Coating Booth #1 and PVC Coating Booth #2, Black Coat and Wax Booth and Anticorrosion Coating Booth are in operation and shall be maintained in accordance with manufacturer's specification. Filters shall be changed on a monthly basis. Magnehelic pressure gauges shall be installed for continuous pressure monitoring and to detect whether filters need to be changed more frequently due to abnormal overspray loading. When the gauges indicate that a problem exists for a dry filter, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.11 Record Keeping Requirements

(a) To document the compliance status with Conditions D.6.1 and D.6.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.6.1 and D.6.3. Records necessary to demonstrate compliance shall be available not later than 30 days after the end of each compliance period.

(1) The VOC content of each coating material (as applied, less water) and the VOC content of each solvent (including purge solvents and thinners) used less water.

(2) The solids content of each coating material used (as applied).

(3) The amount of coating material and solvent (including purge solvents and thinners) used on a daily basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvent.

(4) The volume weighted average VOC content of the coatings used (as applied) for each day.

(b) To document the compliance status with Condition D.6.9, the Permittee shall maintain copies of the training program, and the list of trained operators. Training records shall be maintained on site or available not later than 1 hour for inspection by IDEM.

(c) To document the compliance status with Condition D.6.10, the Permittee shall maintain log containing records of dry filter replacement, and any required corrective actions taken.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.6.12 Reporting Requirements

A monthly summary of the daily VOC content of the coatings used, based on a volume weighted average from the Sealing and PVC Undercoating Line and Anticorrosion Coating Booth to document the compliance status with Condition D.6.1, shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(i) Trim Line, identified as Unit 010, application in the Body Shop and Trim Shop of adhesives and sealers to various vehicle parts, constructed in 1989 and approved in 2012 for modification which includes increasing the line speed to allow more vehicles to be coated on an hourly basis and approved in 2014 to construct the following in order to accommodate production increase from 310,000 vehicles per year to 450,0000 vehicles per year:

(1) One (1) Wax application line for the application of underbody wax.

(2) One (1) startup and roll test operation.

(3) Robotic applicators, permitted in 2016 for construction in the window installation area of Trim Line B, Unit 010 to allow for a new quarter glass side window for a new vehicle model.

(4) Approved in 2016 to include chemical compound trans-1,3,3,3-tetrafluoropropene in the air conditioning refrigerant for vehicles assembled on Trim Lines A and B.

(j) Six (6) storage tanks, identified collectively as Unit 011, approved in 2014 to increase utilization to accommodate the increase in production capacity from 310,000 vehicles per year to 450,000 vehicles per year, which includes the following equipment:

(1) Gasoline storage tank, with a capacity of 15,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(2) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(3) Waste purge thinner storage tank, with a capacity of 6,000 gallons, constructed in 1992;

(4) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 2005;

(5) Windshield washer fluid storage tank, with a capacity of 5,000 gallons, constructed in 1988;

(6) Gasoline storage tank, with a capacity of 1,500 gallons, installed in 2004; and

(k) Purge solvent usage and capture system, identified as Unit 012, constructed in 1989 and modified in 2006 and 2010 to allow for purging and capturing of solvent and waterborne purge materials.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for VOC for the facilities described in this section is the following:

(a) Purge solvent capture system, identified as Unit 012, will be utilized each time that any coating application equipment is purged. The purge solvent capture systems shall have a minimum overall capture efficiency of at least eighty percent (80%). Collected

purge solvent shall be retained in closed conveyances to the Permittee's spent purge solvent storage tank or in closed containers until such time as they are shipped offsite for disposal or recycling.

(b) The 15,000-gallon gasoline storage tank (one of six tanks identified as 011) shall be equipped with:

(1) a submerged fill pipe,

(2) pressure relief valve set to 0.7 psi or orifice of 0.5 inches in diameter, and

(3) a Stage I vapor balance system between the tank and transport.

Tank trucks shall not be unloaded unless they are properly equipped and connected to the vapor balance system and the system is in operation.

Compliance with these limitations, and those contained in Conditions D.1.3, D.2.1, D.4.1, D.5.1, D.6.1, and D.8.1, will satisfy the requirements of 326 IAC 2-2 and 326 IAC 8-1-6.

D.7.2 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3, PSD 157-31885-00050 and PSD 157-33759-00050, the VOC BACT for the Trim Line, identified as Unit 010 shall be the following:

(a) The monthly volume weighted average of the VOC content of the adhesives and other materials used in the Trim Line, Unit 010 for window installation shall not exceed 0.40 pounds of VOC per gallon of coating, as applied.

(b) The monthly volume weighted average of the VOC content of the adhesives and sealers used in the Trim Line, Unit 010 excluding window installation materials shall not exceed 0.30 pounds of VOC per gallon of coating, as applied.

D.7.3 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review; Requirements) and PSD 157-33759-00050, the BACT for the existing Trim Line, Unit 010 - Fluid/Gasoline Fill to Vehicles shall be the following:

(a) Vehicles must be equipped with on-board refueling vapor recovery system (ORVR) or the fluid/gasoline filling operation must utilized Stage II vapor recovery system.

(b) The Permittee shall conduct daily checks of the Stage II Vapor Recovery System key operating parameters on days in which the filling of fluid/gasoline is conducted for vehicles not equipped with on-board refueling vapor recovery system (ORVR).

D.7.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan, is required for these facilities and their respective control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.5 Record Keeping Requirements

(a) To document the compliance status with Condition D.7.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance

with the VOC emission limit established in Condition D.7.2. Records necessary to demonstrate the compliance status shall be available not later than 30 days of the end of each compliance period.

(1) The VOC content of each coating/adhesive (as applied).

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(2) The volume weighted average VOC content of the coatings/adhesives used (as applied) for each month.

(3) The monthly coatings/adhesives usage in gallons.

(b) To document the compliance status with Condition D.10.3, the Permittee shall maintain records in accordance with (1) and (2):

(1) Date and results of inspection made to the vapor recovery system.

(2) Dates and corrective actions made to the vapor recovery system malfunctions, defects and leaks.

(c) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.7.6 Reporting Requirements

A quarterly report of the monthly volume weighted average of the VOC content of the adhesives used in the Trim Line, unit 010 for window installation, and all the other adhesives used and the quarterly summary of the information to document the compliance status with Condition D.7.2, shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(1) Six (6) general hot water boilers with a combined heat input capacity of 19.6 MMBtu/hr. [326 IAC 2-2] [326 IAC 6-2-4]

(2) Other insignificant natural gas combustion units: [326 IAC 2-2]

(A) Stamping Shop Steam Cleaner

(B) Distillation Room Heater

(C) Makeup Air Units (7)

(D) Unit Heaters (50)

(E) Door Heaters (14)

(F) Air Handling Units (48)

(G) Heating and Ventilation Units (6)

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment: [326 IAC 2-2]

(1) One (1) Stamping Shop; (including new equipment installed in 2014 as part of the Expansion Project); and

(2) Two (2) body lines within one (1) Body Shop with MIG and resistance welding robots, and one (1) grinding booth constructed in 1989 and approved for modification in 2012 to expand the Body Shop Building to include a Parts Storage Area and Body Shop Processing Area including the following:

(i) One (1) natural gas-fired air supply unit, with a maximum heat input capacity of 1.73 million British thermal units per hour (MMBtu/hr); and

(ii) MIG welding operations, with a maximum welding rod usage of 96,105 pounds per year

(c) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(d) Deburring; buffing; polishing; abrasive blasting activities; pneumatic conveying; and woodworking operations.

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

(e) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) Gasoline Fill Operations (Benzene, Naphthalene, Ethylbenzene, Styrene, Toluene, Hexane, Xylene, Methyl Tert-butyl Ether) [326 IAC 2-2]

(2) The following storage tanks permitted under OP 79-09-93-0454, issued on July 26, 1989:

(A) One (1) double-walled fixed-roof engine oil storage tank, with a capacity of 5,000 gallons; and

(B) One (1) double-walled fixed-roof power steering fluid storage tank, with a capacity of 5,000 gallons;

(3) The following activities permitted under E 157-14535-00050, issued on October 10, 2001: assembly and testing (including engine test stands);

(4) Manual solvent wipedown;

(5) One (1) power steering fluid storage tank, with a capacity of 5,000 gallons, installed in 1988.

(6) One (1) transmission oil storage tank, with a capacity of 5,000 gallons, installed in 1988.

(7) One (1) Antifreeze storage tank, with a capacity of 10,000 gallons, installed in 1988.

(8) One (1) Antifreeze storage tank, with a capacity of 12,000 gallons, installed in 1988.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

(a) Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for VOC for the insignificant vehicle gasoline fueling operation is the use of a Stage II vapor balance control system. This system shall be in operation whenever vehicles are being fueled.

Compliance with this limitation, and those contained in Conditions D.1.3, D.2.1, D.4.1, D.5.1, D.6.1, and D.7.1, shall satisfy the requirements of 326 IAC 2-2.

(b) Pursuant to PSD/SSM 157-31885-00050 and 326 IAC 2-2-3 (Control Technology Review Requirements), the Permittee shall comply with the following BACT requirements:

(1) The VOC BACT for the one (1) 1.73 MMBtu/hr Body Shop Air Supply Unit shall not exceed 0.0055 pound per million British thermal units (lb/MMBtu).

(2) The Permittee shall perform good combustion practices for the one (1) 1.73 MMBtu/hr Body Shop AHU.

(3) The one (1) 1.73 MMBtu/hr Body Shop ASU shall burn natural gas only as fuel.

D.8.2 Prevention of Significant Deterioration - Best Available Control Technology for Nitrogen Oxides (NOx) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for NOx for the insignificant natural gas combustion equipment described in this section is the following:

(a) The NOx emissions from the following insignificant natural gas combustion facilities shall not exceed 0.10 pounds per million Btu (lb/MMBtu) heat input each:

(1) Stamping Shop Steam Cleaner

(2) Hot Water Boilers (6)

(3) Makeup Air Units (7)

(4) Unit Heaters (33 - does not include 17 unit heaters in new engine manufacturing facility)

(5) Door Heaters (12 - does not include 2 door heaters in new engine manufacturing facility)

(6) Air Handling Units (42 - does not include 6 air handling units in new engine manufacturing facility)

(7) Heating and Ventilation Units (6)

(b) All combustion operations at the source shall use low-NOx natural gas burners.

Compliance with these limitations, and those contained in Conditions D.2.2, D.4.2, and D.6.2, shall satisfy the requirements of 326 IAC 2-2.

D.8.3 Particulate Matter from Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the particulate matter emissions from the six (6) insignificant natural gas-fired general hot water boilers with a combined heat input capacity of 19.6 MMBtu/hr shall each not exceed 0.314 pound per MMBtu energy input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 120 MMBtu/hr).

D.8.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan, is required for the insignificant gasoline filling operation and its Stage II vapor balance control system. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.5 Record Keeping Requirements

(a) To document the compliance status with Condition D.8.1(b)(1), the Permittee shall maintain records of the vendor design guarantees for the one (1) 1.73 MMBtu/hr Body Shop Air Supply Unit.

(b) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.9 EMISSIONS UNIT OPERATION CONDITIONS

Entire Paint Coating Line System C- 2014 Project, as described in Section D.10

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review; Requirements) and PSD 157-33759-00050, the BACT for the Paint Coating Line System C shall be the following:

(a) The total VOC emissions from the entire Paint Coating Line System C- 2014 project, including the PTE change from the modified existing emission units in Section D.5(h), and Section D.7(i) affected by this project shall be limited to less than 766.2 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The Paint Coating Line System C vehicle production shall be limited to 160,000 vehicles per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) The total natural gas combustion at the entire Paint Coating Line System C- 2014 project (excluding the 4.8 MMBtu/hr natural gas-fired emergency generator) shall be limited to less than 751 million standard cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month.

The NOx emissions from the natural gas combustion units at Paint Line System C shall not exceed 100 pounds per million cubic feet (lb/MMCF) of natural gas.

Compliance with this limitation, and those contained in Conditions D.5.1, D.7.2, D.10.1 shall satisfy the requirements of 326 IAC 2-2. Compliance with Condition D.10.2, shall satisfy the requirements of 326 IAC 2-2 and 326 IAC 8-1-6.

Compliance with D.9.1(c) shall limit NOx emissions to less than 40 tons per year and renders 326 IAC 2-2 not applicable.

D.9.2 PSD Minor Limitations for Particulate (PM, PM10, PM2.5) Emissions

The particulate (PM,PM10 and PM2.5) emissions from ED Coating, Unit 013, Sealing, LASD (Liquid Applied Sound Deadener Coating) and PVC Coatings, Unit 014, Intermediate Surfacer, Unit 015, Topcoat, Unit 016, Anticorrosion Coating (Trim and Final Assembly), Unit 017, Black and Wax Booth, Unit 017, Natural Gas Combustion units, at Paint Coating Line System C and PTE change from modified Plastic Bumper Booth 005B, Final Repair, Unit 007, and modified Trim Line, Unit 010 at paint Line Coating Systems A/B shall be limited to less than 25 tons of PM per twelve consecutive month period, less than 15 tons of PM10 per twelve consecutive month period and less than 10 tons of PM2.5 per twelve consecutive month period.

Compliance with this condition shall render 326 IAC 2-2 not applicable.

Compliance Determination Requirements [326 IAC 2-7-5(1)]

D.9.3 Volatile Organic Compounds (VOC), Particulate (PM, PM10, PM2.5) Emissions

(a) Compliance with the VOC emissions limit in Condition D.9.1(a) shall be determined by using the following equation, which calculates tons of VOC emissions per month, and adding the result to the calculated VOC emissions from the previous eleven months:

Total VOC Emissions (ton/month) = ED Coating, Unit 013 VOC + Sealing, LASD (Liquid Applied Sound Deadener Coating) and PVC Coatings, Unit 014 VOC + Intermediate Surfacer, Unit 015 VOC + Topcoat, Unit 016 VOC + Anticorrosion Coating (Trim and Final Assembly), and Black and Wax Booth Unit 017 VOC + Purge Solvent and Capture, Unit 019 VOC + Miscellaneous Cleaning Solvents, Unit 020 VOC + Natural Gas Combustion VOC + Insignificant VOC Sources + VOC PTE change from modified Plastic Bumper Booth 005B, Final Repair, Unit 007, Trim Line, Unit 010, and Storage Tanks (i.e., Gasoline, Purge Thinner, Waste Purge, Vehicle Fluids), Unit 011

Where:

VOC emissions from each coating booth, $Vb = \sum_{i=1}^{n} (Ci \times Di \times Wi) \times (1-CE) \times 1$ ton/2000 lbs

Vb = VOC emissions from each coating booth, ton/month
Ci = usage of coating i in gallons per month;
Di = density of coating i in pounds per gallon;
Wi = weight percent organics from coatings i
CE = overall VOC control efficiency for each booth, when applicable.

Natural Gas Combustion VOC Emissions, tons/month = natural gas usage (MMCF/month) x 1020 MMBtu/1MMCF x 0.0054 lb VOC/MMBtu x 1 ton/2000 lbs

(b) Compliance with the particulate (PM, PM10, PM2.5) emission limits in Condition D.9.2 shall be determined by using the following equation, which calculates pounds of particulate emissions per month, and adding the result to the calculated particulate emissions from the previous eleven months:

Total Particulate Emissions (lb/month) = ED Coating, Unit 013 PM, PM10, PM2.5, Sealing, LASD (Liquid Applied Sound Deadener Coating) and PVC Coatings, Unit 014 PM, PM10, PM2.5, Intermediate Surfacer, Unit 015 PM, PM10, PM2.5, Topcoat, Unit 016 PM, PM10, PM2.5, Anticorrosion Coating (Trim and Final Assembly) and Black and Wax Booth, Unit 017 PM, PM10, PM2.5, Natural Gas Combustion units PM, PM10, PM2.5 at Paint Coating Line System C, and PTE change from modified Plastic Bumper Booth 005B, Final Repair, Unit 007, and Trim Line, Unit 010 at paint Line Coating Systems A/B

Where:

PM, PM10, PM2.5 emissions from each coating booth = $\sum_{i=1}^{n} (Ci * D i* Si) * (1-TE) * (1-CE)$;

Natural Gas Combustion PM/PM10 = natural gas usage (MMCF/month) * 7.6 lb PM/MMCF;

Ci = usage of coating i in gallons per month;
Di = density of coating i in pounds per gallon;
Si = solids content of coating i, expressed as a decimal weight percent;
TE = solids transfer efficiency of the applicator for each booth, based on transfer efficiency determination tests in D.10.10(b); and
CE = particulate control efficiency for each booth, based on manufacturer data.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.4 Record Keeping Requirements

(a) To document the compliance status with Conditions D.9.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish the compliance status with the VOC emission limit established in Condition D.9.1(a). Records necessary to demonstrate the compliance status shall be available not later than 30 days after the end of each compliance period.

(1) The VOC content of each coating material and solvent (including purge solvents and thinners).

(2) The amount of coating material and solvent (including purge solvents and thinners) used on a monthly basis

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvent.

(3) The total VOC emissions from coatings and solvents (including purge solvents and thinners) for each month.

(4) The amount of coating material and solvent (including purge solvents and thinners) transferred off-site for disposal or recycling for each month.

(5) The density of each coating.

(b) To document the compliance status with Condition D.9.1(b), the Permittee shall maintain records of monthly vehicle production.

(c) To document the compliance status with Condition D.9.1(c), the Permittee shall maintain records of monthly natural gas usage for each month.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.9.5 Reporting Requirements

(a) Reports of monthly VOC emissions from the Paint Coating Line System C shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported, to demonstrate the compliance status with Condition D.9.1(a).

(b) Reports of monthly vehicle production totals to demonstrate the compliance status with Condition D.9.1(b), shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported.

(c) Reports of monthly natural gas usage to demonstrate the compliance status with Conditions D.9.1(c) shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported.

(d) Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.10 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through 13-9, consisting of the following units:

(1) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, comprised of six (6) units with a maximum heat input capacity of 1.3 million British thermal units per hour (MMBtu/hr) each and a total maximum heat input of 7.8 MMBtu/hr permitted in 2016 for construction.

(2) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(3) One (1) ED Oven (pretreatment drying oven), with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(4) One (1) ED Body Cool Down Area.

(5) One (1) ED Deck and ED Sand Area.

(6) One (1) Paint Storage Room.

(7) One (1) Working Stage Air House #1 to support the Prep Deck and Offline Areas rated at 11.0 MMBtu/hr, permitted in 2016 for construction..

(8) One (1) Working Stage Air House RFH to support the Surfacer Sand, Wet Sand #1 and #2, ED Sand, Sealer and PVC Area with no heating components.

(b) Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Line, identified as Unit 014, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 3 exhaust stacks, identified as Stacks 14-1 through 14-3, consisting of the following:

(1) One (1) PVC Coating Booth #1, equipped with airless spray application and pedestal robotic spray system, using a dry filter to control the particulate overspray emissions.

(2) One (1) PVC Sealer Oven, with a maximum heat input capacity of 3.5 MMBtu/hr, using no control, permitted in 2016 for construction.

(3) One (1) PVC Cool Down Area, using no controls.

(4) One (1) Sealer Application Area, using no controls.

(5) One (1) LASD (Liquid Applied Sound Deadener) Application Area, using no controls.

(c) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(1) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Intermediate Coating Oven, with a maximum heat input capacity of 10.1 MMBtu/hr, with no VOC control, permitted in 2016 for construction

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(3) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at 2.5 MMBtu/hr, permitted in 2016 for construction.

(4) One (1) Intermediate (Surfacer) Air House rated at 26.5 MMBtu/hr permitted in 2016 for construction.

(5) One (1) Intermediate Cool Down Area, using no controls.

(6) One (1) main paint mix room.

(d) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-1 through 16-26, consisting of the following:

(1) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of 7.6 MMBtu/hr, using a 0.99 MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control, permitted in 2016 for construction.

(3) One (1) Topcoat natural gas-fired flash zone heater rated at 2.5 MMBtu/hr permitted in 2016 for construction.

(4) One (1) Topcoat #C1 Cool Down Area, using no controls.

(5) One (1) main paint mix room.

(6) One (1) Topcoat Air House rated at 42.0 MMBtu/hr, permitted in 2016 for construction.

(7) One (1) Paint Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

(e) Anticorrosion Coating Operations, identified as Unit 017, with a capacity of 225,000 units per year (to be built as part of existing paint lines A/B), approved in 2014 for construction, venting to 2 exhaust stacks, identified as Stacks 17-1 and 17-2, consisting of the following units:

(1) One (1) Black and Wax Coating Booth, to be part of existing paint lines “A/B”, equipped with air atomized and air-assisted airless spray systems, using a dry filter to control the particulate overspray emissions.

(2) One (1) Black and Wax Coating Booth natural gas-fired burner, with a maximum heat input capacity of 13.7 MMBtu/hr, permitted in 2016 for construction.

(3) One (1) wax application line in the Trim & Final Assembly Area~~.~~

(f) Miscellaneous combustion devices, approved in 2016 for construction:

(1) One (1) Working Stage Air House #2 used to support the Inspection, Touch-up area rated at 11.0 MMBtu/hr.

(2) One (1) Working Stage Air House used to support Paint Coating Line C with no heating

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components.

(g) Purge solvent usage and capture system, identified as Unit 019, approved in 2014 for construction, designed to allow for purging and capturing of solvent and waterborne purge materials.

(h) Miscellaneous support cleaning operations, identified as Unit 020, approved in 2014 for construction, which include wiping solvent and miscellaneous cleanup materials.

(i) An additional Startup and Roll Test Line, approved in 2014 for construction.

(j) Engine assembly C -

(1) One (1) additional dynamometer gasoline engine testing, where engines are tested prior to installation in the vehicle chassis, approved in 2014 for construction.

(2) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

(k) Other insignificant natural gas combustion units approved in 2014 and 2016 for construction: [326 IAC 2-2]

(A) Rooftop Units -
- Engine Assembly Expansion - 4 Units (1.6 MMBtu/hr total)
- Engine Warehouse Expansion - 2 Units (0.8 MMBtu/hr total)
- Trim Warehouse Phase 1 - 5 Units (2.0 MMBtu/hr total)
- Trim Warehouse Phase 2 - 7 Units (2.8 MMBtu/hr total)
- Trim Warehouse Phase 3 - 7 Units (2.8 MMBtu/hr total)
- Stamping Warehouse 1 - 4 Units (1.6 MMBtu/hr total)
- Motor Pool Bldg. - 5 Units (2.0 MMBtu/hr total)
- Paint Coating Line C Heating and Cooling Units - 10 units (7.4 MMBtu/hr total)
- Paint Coating Line C Makeup Air Heating Units - 5 units (8.1 MMBtu/hr total)
- Paint Coating Line C Air Handling Units - 2 units (8.3 MMBtu/hr total)

(B) Heater Units -
- Engine Warehouse Expansion - 2 Units (0.8 MMBtu/hr total)
- Trim Warehouse Phase 1 - 3 Units (1.2 MMBtu/hr total)
- Trim Warehouse Phase 2 - 3 Units (1.2 MMBtu/hr total)
- Trim Warehouse Phase 3 - 4 Units (1.6 MMBtu/hr total)
- Motor Pool Accessary Bldg - 2 Units (0.8 MMBtu/hr total)
- Paint Coating Line C Heater Units - 17 units (6.8 MMBtu/hr total)

(C) Natural Gas-Fired Boiler:
One (1) spray booth boiler comprised of six (6) units with a maximum heat input rate of 1.25 MMBtu/hr each and a total maximum heat input rate of 7.5 MMBtu/hr.

(D) Emergency Equipment:

(1) One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (rated at 636 HP), permitted in 2016 for construction.

SECTION D.10 EMISSIONS UNIT OPERATION CONDITIONS

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review; Requirements) and PSD 157-33759-00050, the BACT for VOC emissions from the following facilities in Paint Coating Line System C shall be the following:

(a) The VOC emissions from the ED Coating Line, identified as Unit 013 shall be limited to less than 1.15 pounds of VOC per gallon applied coating solids (lb/gacs), based on a daily volume weighted average, without add-on control.

(b) The VOC emissions from the Sealer, LASD and PVC Undercoating Line, identified as Unit 014 shall be limited to less than 0.38 pounds per gallon (lb/gal), based on a daily volume weighted average, without add-on control.

(c) When using Option A, the VOC emissions from the Intermediate Surfacer, identified as Unit 015, shall be limited to less than 4.8 pounds of VOC per gallon applied coating solids (lb/gacs), based on a daily volume weighted average, without add-on control.

(d) When using Option B, the combined VOC emissions from the Intermediate Surfacer, identified as Unit 015 and Topcoat, Unit 016 ("wet on wet" system), shall be limited to less than 10.41 pounds of VOC per gallon applied coating solids (lb/gacs), based on a daily volume weighted average, without add-on control.

(e) When using Option A, the VOC emissions from the Topcoat System #C1, identified as Unit 016, shall be limited to less than 10.96 pounds per gallon applied coating solids (lb/gacs), based on a daily volume weighted average.

(f) When using either Option A or Option B, the VOC emissions from the Topcoat System #C1 Oven, Unit 016 shall be vented to the thermal oxidizer (TO-C1) with destruction efficiency of 95% and a minimum capture efficiency of 18% (booth/oven split).

(g) The BACT for the Black and Wax Coating Booth, Unit 017 shall be the following:

(1) The VOC emissions from the phthalic black material shall be limited to less than 1.0 pounds per gallon (lb/gal) based on a daily volume weighted average.

(2) The VOC emissions from the inner wax material shall be limited to less than 3.5 pounds per gallon (lb/gal) based on a daily volume weighted average.

(h) The VOC emissions from the Anticorrosion Wax Booth, Unit 017 shall be limited to less than 2.51 pounds per gallon (lbs/gal), based on a daily volume weighted average.

(i) The annual VOC usage for paint line cleaning/purge solvents minus the amount of VOC in the purge material collected associated with the Purge Solvent Usage and Capture System, Unit 019 shall be limited to less than 83.8 tons per twelve consecutive month period with compliance determined at the end of each month.

The annual VOC usage for wiping solvents and clean up materials shall be limited to less than 15.2 tons per twelve consecutive month period with compliance determined at the end of each month.

Good work practices shall be conducted for the Purge Solvent Usage and Capture System, Unit 019 and Solvent Wiping and Cleaning, Unit 020 which includes the following:

(1) Purge solvent capture systems shall be utilized each time that any coating application equipment is purged. The purge solvent capture systems shall have a minimum overall capture efficiency of at least eighty percent (80%). Collected purge solvent shall be retained in closed conveyances to the Permittee's spent purge solvent storage tank or in closed containers until such time as they are shipped offsite for disposal or recycling.

(2) Block painting will be utilized whenever possible to minimize color changes and the resulting purge.

(3) Clean up rags with solvent shall be stored in closed containers.

(4) Documentation shall be maintained on-site to demonstrate how these materials are being directed and collected for both the solvent-borne and water-borne purge material.

(j) The BACT for the following miscellaneous natural gas combustion units shall be the following:

(1) The VOC emissions from the Working Stage Air House and Mixing Air House shall each be limited to less than 0.0054 pound per million British thermal units (lb/MMBtu) and shall only combust natural gas.

(2) The VOC emissions from the Rooftop and Heater Units not mentioned in condition D.10.1(k) shall each be limited to less than 0.0054 pound per million British thermal units (lb/MMBtu) and shall only combust natural gas.

(k) The PSD BACT for the following miscellaneous natural gas combustion units shall be the following:

Combustion Emission Unit/ID	number of Units	Heat Input (MMBtu/hr)
PAINT SHOP C NATURAL GAS COMBUSTION UNITS		
Pretreatment Boiler – Ed Body Area	6	7.8 total
ED Oven	1	9.0
PVC Sealer Oven	1	3.5
Intermediate (Surfacer) Oven	1	10.1
Intermediate (Surfacer) Flash Zone Heater	1	2.5
Topcoat Flash Zone Heater	1	2.5
Topcoat #C1 Oven	1	7.6
Topcoat Oven RTO	1	0.99
Intermediate (Surfacer) Air Houses	1	26.5

Combustion Emission Unit/ID	number of Units	Heat Input (MMBtu/hr)
Topcoat Air House	1	42.0
Working Stage Air House #1-Prep Deck , Offline Areas	1	11.0
Black Coat & Wax Booth	1	13.7
Spray Booth Boilers	6	7.5 total
Paint Mixing Air House-Body	1	2.0
Working Stage Air House #2 - Inspection, Touch-Up Area	1	11.0
NEW ROOFTOP UNITS		
Heating and Cooling Units		
HCU-14-1 Pretreatment Roof	1	0.8337
HCU-14-2 Pretreatment Roof	1	0.8337
HCU-14-3 Pretreatment Roof	1	0.8337
HCU-14-4 Pretreatment Roof	1	0.8337
HCU-14-5 Pretreatment Roof	1	0.8337
HCU-14-6 Pretreatment Roof	1	0.8337
HCU-11 Oven Roof	1	0.8
HCU-12 Cafeteria	1	0.8
HCU-13 Roof of Conveyor Bridge	1	0.4
HCU-14 Roof of Conveyor Bridge	1	0.4
Makeup Air heating Units		
MAU-14-1 Roof Oven Area	1	1.62
MAU-14-2 Roof Oven Area	1	1.62
MAU-14-3 Roof Oven Area	1	1.62
MAU-14-4 Roof Wastewater	1	1.62
MAU-14-5 Roof Paint Sludge	1	1.62
AIR HANDLING UNITS		
AHU-14-1 Penthouse	1	4.167
AHU-14-2 Penthouse	1	4.167
NEW HEATER UNITS		
Unit-14-1 Oven-A4-B0	1	0.4
UH-14-2 Oven - A2 -	1	0.4

Combustion Emission Unit/ID	number of Units	Heat Input (MMBtu/hr)
B1.5		
UH-14-3 Oven - A2 - B3	1	0.4
UH-14-9 Penthouse - A9 - B2	1	0.4
UH-14-10 Penthouse - A17 - B3	1	0.4
UH-14-11 Penthouse - A12.5 - B0	1	0.4
UH-14-12 Penthouse - A15 - B0	1	0.4
UH-14-13 Penthouse - A17 - B1	1	0.4
UH-14-20 North Dock - A15 - B6	1	0.4
UH-14-21 North Dock - A15 - B6	1	0.4
UH-14-22 WWT - A4.5 - B6	1	0.4
UH-14-23 WWT - A2 - B7	1	0.4
UH-9A Conveyor Bridge	1	0.4
UH-10-01 Conveyor Bridge	1	0.4
UH-9-15 Conveyor Bridge	1	0.4
UH-9-16 Conveyor Bridge	1	0.4
UH-5-01 Conveyor Bridge	1	0.4

(1) The VOC emissions from the combustion units in the above table shall each be limited to less than 0.005 pound per million British thermal units (lb/MMBtu).

(2) The combustion of only natural gas fuel; and

(3) Use of good combustion practices, which includes proper care and maintenance of the natural gas burner systems.

(l) The Permittee shall observe good work practices when testing engines and during startup and roll test of the vehicles by minimizing excessive testing of the vehicle powertrain outside the normal testing specification ranges, (i.e. speed, duration and distance during the test).

(m) The BACT for the 4.8 MMBtu/hr (636 HP) emergency generator shall be the following:

(1) The VOC emissions from the 4.8 MMBtu/hr (636 HP) emergency generator shall be limited to 1 g/HP-hr (0.0022 lb/HP-hr (1.4 lbs/hr)).

(2) The emergency generator shall only combust natural gas for fuel; and

(3) Use of good combustion practices, which includes proper care and maintenance of the natural gas burner systems.

Compliance with Condition D.10.1 shall satisfy the requirements of 326 IAC 2-2.

D.10.2 Reserved

D.10.3 Automobile and Light Duty Truck Coating Operations [326 IAC 8-2-2] [326 IAC 8-1-2]

(a) Pursuant to 326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations), the volatile organic compound (VOC) content of coatings applied to automobile and light duty truck bodies, hoods, doors, cargo boxes, fenders, and grill openings in the Intermediate Surfacer Coating Line, identified as Unit 015 in combination with Electrodeposition Coating of Vehicle Bodies (ED) Coating Line, identified as Unit 013 shall be limited to less than 0.23 kilograms per liter of coating (1.9 pounds per gallon), excluding water, delivered to the primer coating applicators.

(b) Pursuant to 326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations), the volatile organic compound (VOC) content of coatings applied to automobile and light duty truck bodies, hoods, doors, cargo boxes, fenders, and grill openings in the Topcoat System, identified as Unit 016 shall be limited to less than 0.34 kilograms per liter of coating (2.8 pounds per gallon) excluding water, delivered to the applicator from topcoat application, flash-off area and oven operations.

(c) Pursuant to 326 IAC 8-1-2(a)(5), VOC emissions for Topcoat System, identified as Unit 016 as required in 326 IAC 8-2-2 and Condition D.10.3(b) shall be limited to no greater than equivalent emission limitations based on an actual measured transfer efficiency higher than 30%. The equivalent emission limitation for the Topcoat System, identified as Unit 016 is 1.83 kilograms of VOC per liter solids deposited (15.1 pounds of VOC per gallon solids deposited).

(d) Pursuant to 326 IAC 8-1-2(a), these emission limitations shall be achieved using control, higher solids (low solvent) coatings, waterborne coatings, and/or daily volume-weighted averaging.

D.10.4 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 8-2-9, the daily VOC emissions from Sealing, LASD and PVC Undercoating Booths, Unit 014 shall be limited to less than 3.5 pounds of VOC per gallon of coating less water (0.42 kilograms of VOC per liter of coating less water), delivered to a coating applicator that applies extreme performance coatings.

(b) Pursuant to 326 IAC 8-2-9, the daily VOC emissions from Black and Wax Booth, Unit 017 shall be limited to less than 3.0 pounds of VOC per gallon of coating less water (0.36 kilograms of VOC per liter of coating less water).

D.10.5 Particulate Emissions from Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the particulate emissions from the Pretreatment and ED Boiler shall each not exceed 0.284 pound per million British thermal units (lb/MMBtu).

The limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = 176.6 MMBtu/hr).

D.10.6 Particulate Emissions [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate emissions from the Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Booth identified as Unit 014; Intermediate Coating Booth, identified as Unit 015; Topcoat #C1 Booth identified as Unit 016; Black and Wax Coating Booth identified as Unit 017 shall be controlled by dry filters or water wash system or equivalent control. The Permittee shall operate the control devices in accordance with manufacturer's specifications.

D.10.7 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan, is required for these facilities and their respective control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-7-5(1)]

D.10.8 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

(a) Compliance with the VOC emission limits in Condition D.10.1 shall be determined with the following equations (as applicable):

$$\text{VOC emissions (lb VOC/gal applied solids)} = [\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} (S_i \times TE)] \times [1 - (CE \times DE)]$$

Where:

C_i is the VOC content of the coating ($_i$) in pounds of VOC per gallon of coating, as applied;
U_i is the usage rate of the coating ($_i$) in gallons per day;
S_i is the usage rate of coating ($_i$) solids in gallons per day;
TE is the transfer efficiency of the applicator;
CE is the minimum capture efficiency of the incinerator (as applicable); and
DE is the minimum destruction efficiency of the incinerator (as applicable).

Or, if the emission limit is in units of pounds of VOC per gallon of coating less water:

$$\text{VOC emissions (lb VOC/gal coating less water)} = [\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} U] \times [1 - (CE \times DE)]$$

Where:

C_i is the VOC content of the coating ($_i$) in pounds of VOC per gallon of coating less water, as applied;
U_i is the usage rate of the coating ($_i$) in gallons per day;
U total usage rate from all coatings (from 1 to n), gal/day
CE is the minimum capture efficiency of the incinerator (as applicable); and
DE is the minimum destruction efficiency of the incinerator (as applicable);

Or, if the emission limit is in units of pounds of VOC per gallon of coating:

VOC emissions (lb VOC/gal coating) $= [\sum_{i=1}^{n} (C_i \times U_i)$

Where:

i = 1 to n
C_i is the VOC content of each individual coating (i) in pounds of VOC per day, as applied;
U_i is the usage rate of each individual coating (i) in gallons per day;
n is the number of individual coatings

(b) Compliance with the VOC limit in Condition D.10.1(i) shall be determined by using the following equation, which calculates the tons of VOC emissions per month, and adding the result to the calculated VOC emissions from the previous eleven months:

VOC Emission Limit = (U x C) x (1-(CE x DE))

Where:

U is the coating usage in tons/month;
C is the VOC content of the coating;
CE is the minimum capture efficiency of the incinerator (as applicable); and
DE is the minimum destruction efficiency of the oxidizer (as applicable).

D.10.9 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

(a) Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the thermal oxidizer, TO-C1 at all times the Topcoat #C1 Oven is in operation to ensure compliance with Conditions D.10.1(d) and (e).

(b) The Topcoat #C1 Oven thermal oxidizer, TO-C1 shall be operated such that it achieve the minimum capture and destruction efficiencies specified in Condition D.10.1(f).

D.10.10 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within sixty (60) days after the startup of operation of the thermal oxidizer (TO-C1) associated with Topcoat System "C1" Oven, the Permittee shall perform VOC testing to verify its VOC destruction efficiency. Performance testing shall utilize methods as approved by the Commissioner and shall be performed at least once every two and one half (2.5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(b) Within sixty (60) days after the startup of operation of the Paint Coating Line C, the Permittee shall perform an initial transfer efficiency test for each paint operation using methods as approved by the Commissioner. Repeat testing is required if significant material or application equipment change has occurred and must be conducted not later than 60 days after start-up and stabilization of the new material, or application equipment. Transfer efficiency testing is not necessary for the following:

(1) Model year product change, unless there are significant changes in the size and shape of the typical vehicle.

(2) Processing and material changes such as new model year or special order colors of the same formula type, minor changes in line rate, minor changes in processing sequence, and minor changes in equipment types.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.10.11 Thermal Oxidizer Temperature [326 IAC 2-7-5(3)]

A continuous monitoring system shall be calibrated, maintained, and operated for measuring the operating temperature of the thermal oxidizer (TO-C1) whenever any of the Topcoat System "C1" Oven is in operation to control VOC emissions from this oven. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a three (3) hour average. Whenever the three (3) hour average operating temperature of this oxidizer is below the three (3) hour average temperature established during the latest stack test that demonstrated compliance, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.10.12 Parametric Monitoring [326 IAC 2-7-5(3)]

The duct pressure or fan amperage, whichever is monitored by the Permittee under this condition, shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

D.10.13 Water Wash Monitoring [326 IAC 2-7-5(3)]

Daily visual inspections shall be made on each water wash flood pans and water circulation associated with the Topcoat #C1 Booth, exhausting to twenty-six (26) exhaust stacks, identified as Stacks 16-1 through 16-26, and Intermediate Coating Booth, exhausting to fourteen (14) exhaust stacks identified as Stacks 15-1 through 15-14, to verify the control system proper operation. A warning system shall be installed and operated to ensure that the water circulation pump is operational at all times when the Topcoat #C1 Booth is in operation. In addition, a red strobe light shall automatically be activated whenever the water circulation pump is down and once a day visual observation of the warning system shall be conducted. When a system warning is received, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.10.14 Dry Filters Monitoring [326 IAC 2-7-5(3)]

Dry filters shall be in place whenever the PVC Coating Booth #1 and Black and Wax Coating Booth, are in operation and shall be maintained in accordance with manufacturer's specification. Filters shall be changed on a monthly basis. Magnehelic pressure gauges shall be installed for continuous pressure monitoring and to detect whether filters need to be changed more frequently due to abnormal overspray loading. When the gauges indicate that a problem exists for a dry filter, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.10.15 Record Keeping Requirements

(a) To document the compliance status with Conditions D.10.1(a) through (h), D.10.3 and D.10.4, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits

established in Conditions D.10.1 through D.10.4. Records necessary to demonstrate compliance shall be available not later than 30 days after the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent applied daily.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup.

(2) The solids content of each coating material used (as applied).

(3) The water content of each coating material used (as applied).

(4) The calculated daily volume weighted average emission in pounds per gallon coating solids as applied.

(5) The calculated daily volume weighted average VOC content per gallon of the coatings less water as applied.

(6) The calculated daily volume weighted average VOC content per gallon of the coatings as applied.

(b) To document the compliance status with Condition D.10.1(i), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.10.1(i). Records necessary to demonstrate compliance shall be available not later than 30 days after the end of each compliance period.

(1) The amount of coating material, wiping/cleaning solvent, purge solvents used on a monthly basis, and amount of purge material (paint solids + solvent) captured and recycled on a monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as wiping/cleaning solvent, and those used as purge.

(c) To document the compliance status with Condition D.10.1(j), the Permittee shall maintain on file vendors guarantees and/or certifications for VOC emissions from the miscellaneous combustion sources.

(c) To document the compliance status with Condition D.10.11, the Permittee shall maintain records of the continuous temperature records (on a three-hour average basis) for the Topcoat System C1 Oven thermal oxidizer (TO-C1) used to demonstrate compliance during the most recent compliant stack test.

(d) To document the compliance status with Condition D.10.14, the Permittee shall maintain log containing records of dry filter replacement, and any required corrective actions taken.

(e) To document the compliance status with Condition D.10.13, the Permittee shall maintain a log of the dates of any water wash system warning system alarm and corrective actions taken.

(f) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.10.16 Reporting Requirements

A monthly summary of the information to document the compliance status with Condition D.10.1 shall be submitted to IDEM, OAQ using the reporting forms located at the end of this permit or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION E.1 **NESHAP**

Emissions Unit Description:

(a) Electrodeposition Coating of Vehicle Bodies (ED Coating Line), identified as Unit 001, with a capacity of 71 units per hour, constructed in 1989 and modified in 2009 and 2010. Approved in 2012 for modification to increase vehicle holding/storage area to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) ED Body Pretreatment area;

(2) One (1) ED Pretreatment Drying Oven, with one (1) insignificant natural gas indirect fired burner with a heat input capacity of 6.0 MMBtu/hr;

(3) One (1) insignificant boiler for paint temperature control, with a heat input capacity of 4.0 MMBtu/hr;

(4) Six (6) insignificant pretreatment boilers for warming water surrounding the ED Body Coating Tank, with a total heat input capacity of 9.0 MMBtu/hr;

(5) One (1) ED Body Coating Tank, utilizing dipping as the method of application;

(6) One (1) ED Body Oven (pretreatment drying oven) rated at 6.0 MMBtu/hr, with five (5) natural gas-fired burners (oven zones #1 through #5) each is rated at 2.5 MMBtu/hr, using a 2.5 MMBtu/hr natural gas-fired catalytic oxidizer (B-ED) as VOC control, and exhausting to one (1) stack, identified as B-ED Inc. (emissions from the entrance to, and exit from, the ED Body Oven use no controls and exhaust to one (1) stack, identified as B-ED Hood Exhaust);

(7) One (1) ED Body Cool Down area; and

(8) One (1) paint storage room.

(b) Sealing and PVC Undercoating Line, identified as Unit 002, with a capacity of 77 units per hour, constructed in 1989 and approved for modification in 2012, consisting of the following units:

(1) One (1) PVC Coating Booth #1, constructed in 1989, utilizing airless spray application system and pedestal robotic spray system, using a dry filter as particulate matter control, approved in 2012 for modification to add four (4) additional spray coating application systems, and exhausting to one (1) stack, identified as PVC-1-2;

(2) One (1) PVC Coating Booth #1 Preheat (oven zone #1), constructed in 1989, with one (1) natural gas indirect fired burner with a heat input capacity of 3.5 MMBtu/hr;

(3) One (1) PVC Coating Booth #2, constructed in 1999 and modified in 2006, utilizing the airless spray method of application, using a dry filter as particulate control, approved in 2012 for modification to add two (2) additional spray coating application systems and exhausting to one (1) stack, identified as PVC-Booth 2;

(4) One (1) PVC Coating Booth #2 Preheat (oven zone #2), constructed in 1999, with one (1) natural gas direct fired burner with a heat capacity of 3.5 MMBtu/hr;

(5) One (1) PVC Seal Oven, constructed in 1989, with two (2) insignificant natural gas-fired burners totaling 6.94 MMBtu/hr, using no controls, and exhausting to one (1) stack, identified as PVC-Oven Exhaust;

(6) One (1) PVC Cool Down area, constructed in 1989, using no controls, and exhausting to one (1) stack, identified as PVC Cooling; and

(7) One (1) Sound Deadener Operation approved in 2010 for construction, using no controls.

(c) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, modified in 2006, 2008, 2009, 2010 and 2013, and approved in 2016 for modification, consisting of the following units:

(1) One (1) Topcoat #1 Booth, approved in 2016 to replace existing spray applicators with automated electrostatic bell type spray applicators, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of 2.5 MMBtu/hr.

(2) One (1) Topcoat #1 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/hr and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(3) One (1) Topcoat #1 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(4) One (1) Topcoat #1 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-1 Inc. (emissions from the entrance to and exit from the Topcoat #1 Oven are not controlled and exhaust to one (1) stack, identified as TC-1 Ex.). The oven is equipped with a purge exhaust stack;

(5) One (1) Topcoat #1 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-1 O.Cl.;

(6) One (1) Topcoat #2 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to ten (10) stacks, identified as TC2-1 through TC2-10. One (1) natural gas-fired dry off oven between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr;

(7) One (1) Topcoat #2 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/hr and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(8) One (1) Topcoat #2 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(9) One (1) Topcoat #2 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-2 Inc. (emissions from the entrance to and exit from the Topcoat #2 Oven are not controlled and exhaust to one (1) stack, identified as TC-2 Ex.). The oven is equipped with a purge

exhaust stack;

(10) One (1) Topcoat #2 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-2;

(11) One (1) Topcoat #3 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to five (5) stacks, identified as TUT-1 through TUT-5;

(12) One (1) Topcoat #3 Booth Preheat, with two (2) natural gas-fired burners (oven zones #1 and #2), one (1) with a heat input capacity of 1.5 MMBtu/hr and one (1) with a heat input capacity of 2.5 MMBtu/hr;

(13) One (1) Topcoat #3 Booth Reheat, with one (1) insignificant 1.5 MMBtu/hr natural gas-fired burner (oven zone #3);

(14) One (1) Topcoat #3 Booth Oven, approved in 2013 for modification, with four (4) insignificant natural gas-fired burners with a total maximum heat input capacity of 8.55 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2. The oven is equipped with a purge exhaust stack;

(15) One (1) Topcoat #3 Booth Cool Down area;

(16) One (1) Topcoat #3 Booth natural gas indirect fired flash zone heater between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr, permitted in 2010 for construction; and

(17) Main paint mix room.

(d) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010, Approved in 2012 for modification to include alterations to the conveyor system that will add storage capacity to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) Intermediate Working Stage burner (oven zone #1), with a heat input capacity of 2.5 MMBtu/hr;

(2) One (1) Intermediate Coating Booth, utilizing, two (2) robots for the application of anti-chip (ACC), two (2) manual air assisted spray guns for the application of primer on inner doors for certain colors, followed by the exterior robot e-stat painting process, using a water wash as particulate control, and exhausting to six (6) stacks, identified as SUR-2 through SUR-7;

(3) One (1) Intermediate Booth Preheat (oven zones #2 and #3), with two (2) natural gas-fired burners, each with a heat input capacity of 2.5 MMBtu/hr;

(4) One (1) Intermediate Booth Reheat burner (oven zone #4), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(5) One (1) Intermediate Coating Oven, with five (5) insignificant natural gas direct fired burners totaling 12.42 MMBtu/hr, using a 1.0 MMBtu/hr natural gas-fired catalytic incinerator (SUR) as VOC control, and exhausting to one (1) stack, identified as SUR-1

(emissions from the entrance to and exit from the Intermediate Coating Oven use no controls and exhaust to one (1) stack, identified as Surfacer Hood Exhaust);

(6) One (1) Intermediate Cool Down area, using no controls, and exhausting to one (1) stack, identified as Surfacer Cooling; and

(7) Main paint mix room

(e) Plastic Bumper Coating Line (PBL), identified as Unit 005, with a capacity of 60 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to increase the oven length to accommodate a new bumper design, consisting of the following units:

(1) One (1) PBL Paint Booth, utilizing the air atomization and electrostatic bell methods of spraying, using a water wash as particulate matter control, and exhausting to four (4) stacks, identified as BPR-1, BPR-2, BPR-JR, and BPR-AP;

(2) One (1) PBL Booth Preheat (oven zone #1), with one (1) natural gas-fired burner with a heat input capacity of 1.5 MMBtu/hr;

(3) One (1) PBL Booth Reheat (oven zone #2), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(4) One (1) PBL Oven (ASH preheat), using a 17.1 MMBtu/hr natural gas-fired thermal incinerator as VOC control, and exhausting to one (1) stack, identified as BPR Inc.;

(5) One (1) PBL Cool Down area;

(6) Two (2) PBL natural gas-fired flash zone heaters for the primer and basecoat zones, each with a heat input capacity of 2.5 MMBtu/hr and exhausting to two (2) separate stacks, permitted in 2010 for construction; and

(7) One (1) paint mixing room

(f) Anticorrosion Coating, identified as Unit 006, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to add two (2) spray coating systems at the Black Coat and Wax Booth to allow more vehicles coated hourly, including the following equipment:

(1) One (1) Black Coat and Wax Booth, utilizing air atomized and air-assisted methods of spraying, using a dry filter as particulate matter control, exhausting to BCW Stack;

(2) One (1) Black Coat and Wax Booth natural gas-fired burner, with a heat input capacity of 24.0 MMBtu/hr;

(3) One (1) Anticorrosion Coating Booth, utilizing the air-assisted method of spraying, using a dry filter as particulate control, exhausting to Anticorrosion Stack; and

(4) One (1) insignificant Anticorrosion Coating natural gas-fired burner.

(g) One (1) plastic fascia paint line system, currently identified as PFPLS#2, approved in 2014 for physical modification and operational change as part of the proposed "2014 Increase in Capacity Project" for the plastic bumper coating operations. This will involve conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for Subaru vehicles, with an increase in capacity from 110,000 to 250,000

vehicles per year. PFPLS#2 will be renamed as Unit 005B (if non-Subaru vehicle production ceases), which coats front and rear bumpers, and left and right side molding panels with a maximum capacity of 150,118 units per year, constructed in 2006, consisting of the following units:

(1) One (1) primer spray zone in the PFPLS#2 booth, to be renamed as Unit 005B, currently utilizing air atomized spray with robot method of application and automatic spray applicators with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack , identified as PB2(a). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(2) One (1) basecoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(b). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(3) One (1) clearcoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(c). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(4) Two (2) paint flash off areas for the primer zone and basecoat zone, exhausting to stack PB2(d), which includes natural gas-fired dry off ovens, with a total heat input capacity of 1.1 MMBtu/hr;

(5) Three (3) natural gas direct fired air intake units, each with a heat input capacity of 3.1 million British thermal units per hour (MMBtu/hr);

(6) One (1) fascia paint line, now Unit 005B natural gas-fired curing oven, with a heat input capacity of 2.5 MMBtu/hr, controlled by a catalytic/thermal oxidizer with a heat input capacity of 1.1 MMBtu/hr, exhausting to one (1) stack, identified as PB2(g). Approved in 2014 to increase oven length.

(7) One (1) paint mix room.

(8) One (1) Natural gas-fired burner with a heat input capacity of 3 MMBtu/hr approved in 2014 for construction.

(9) Six (6) back-up manual spray applicators approved in 2014 for construction.

(h) Final Repair (Touchup) painting, identified as Unit 007, constructed in 1989 and approved in 2014 to increase capacity from 10 units per hour to 15 units per hour including the following::

(1) One (1) Touchup IPC Booth, located in the In-Process Control area, utilizing the air atomization method of spraying;

(i) Trim Line, identified as Unit 010, application in the Body Shop and Trim Shop of adhesives and sealers to various vehicle parts, constructed in 1989 and approved in 2012 for modification which includes increasing the line speed to allow more vehicles to be coated on an hourly basis and approved in 2014 for modification in order to accommodate a

production increase from 310,000 vehicles per year to 450,000 vehicles per year.

(1) One (1) Wax Application Line for the application of underbody wax.

(3) Robotic applicators, permitted in 2016 for construction in the window installation area of Trim Line B, Unit 010 to allow for a new quarter glass side window for a new vehicle model.

(j) Six (6) storage tanks, identified collectively as Unit 011, which includes the following equipment:

(1) Gasoline storage tank, with a capacity of 15,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(2) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 1988, using a certified vapor collection and control system; and

(3) Waste purge thinner storage tank, with a capacity of 6,000 gallons, constructed in 1992.

(4) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 2005;

(5) Windshield washer fluid storage tank, with a capacity of 5,000 gallons, constructed in 1988;

(6) Gasoline storage tank, with a capacity of 1,500 gallons, installed in 2004; and

(k) Purge solvent usage and capture system, identified as Unit 012, constructed in 1989 and modified in 2006 and 2010 to allow for purging and capturing of solvent and waterborne purge materials.

Paint Coating Line System C

(a) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through 13-9, consisting of the following units:

(1) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, comprised of six (6) units with a maximum heat input capacity of 1.3 million British thermal units per hour (MMBtu/hr) each and a total maximum heat input of 7.8 MMBtu/hr permitted in 2016 for construction.

(2) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(3) One (1) ED Oven (pretreatment drying oven, with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(4) One (1) ED Body Cool Down Area.

(5) One (1) ED Deck and ED Sand Area.

(6) One (1) Paint Storage Room.

(7) One (1) Working Stage Air House #1 to support the Prep Deck and Offline Areas rated at 11.0 MMBtu/hr, permitted in 2016 for construction.

(8) One (1) Working Stage Air House RFH to support the Surfacer Sand, Wet Sand #1 and #2, ED Sand, Sealer and PVC Area with no heating components.

(b) Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Line, identified as Unit 014, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 3 exhaust stacks, identified as Stacks 14-1 through 14-3, consisting of the following:

(1) One (1) PVC Coating Booth #1, equipped with airless spray application and pedestal robotic spray system, using a dry filter to control the particulate overspray emissions.

(2) One (1) PVC Sealer Oven, with a maximum heat input capacity of3.5 MMBtu/hr, using no control, permitted in 2016 for construction.

(3) One (1) PVC Cool Down Area, using no controls.

(4) One (1) Sealer Application Area, using no controls.

(5) One (1) LASD (Liquid Applied Sound Deadener) Application Area, using no controls.

(c) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(1) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Intermediate Coating Oven, with a maximum heat input capacity of 10.1 MMBtu/hr, with no VOC control, permitted in 2016 for construction.

(3) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at 2.5 MMBtu/hr, permitted in 2016 for construction.

(4) One (1) Intermediate (Surfacer) Air House rated at 26.5 MMBtu/hr permitted in 2016 for construction.

(5) One (1) Intermediate Cool Down Area, using no controls.

(6) One (1) main paint mix room.

(d) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-1 through 16-26, consisting of the following

(1) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of 7.6 MMBtu/hr, using a 0.99 MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control permitted in 2016 for construction.

(3) One (1) Topcoat natural gas-fired flash zone heater rated at 2.5 MMBtu/hr permitted in

2016 for construction.

(4) One (1) Topcoat #C1 Cool Down Area, using no controls.

(5) One (1) main paint mix room.

(6) One (1) Topcoat Air House rated at 42.0MMBtu/hr, permitted in 2016 for construction.

(7) One (1) Paint Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

(e) Anticorrosion Coating Operations, identified as Unit 017, with a capacity of 225,000 units per year (~~if~~ **to** be built as part of existing paint lines A/B), approved in 2014 for construction, venting to 2 exhaust stacks, identified as Stacks 17-1 and 17-2, consisting of the following units:

(1) One (1) Black and Wax Coating Booth, to be part of existing paint lines “A/B”, equipped with air atomized and air-assisted airless spray systems, using a dry filter to control the particulate overspray emissions.

(2) One (1) Black and Wax Coating Booth natural gas-fired burner, with a maximum heat input capacity of 13.7 MMBtu/hr, permitted in 2016 for construction.

(3) One (1) wax application line in the Trim & Final Assembly Area~~.~~

(f) Miscellaneous combustion devices, approved in 2014 for construction:

(1) One (1) Working Stage Air House #2 used to support the Inspection, Touch-up area rated at 11.0 MMBtu/hr.

(2) One (1) Working Stage Air House used to support Paint Coating Line C with no heating components.

(g) Purge solvent usage and capture system, identified as Unit 019, designed to allow for purging and capturing of solvent and waterborne purge materials.

(h) Miscellaneous support cleaning operations, identified as Unit 020, which include wiping solvent and miscellaneous cleanup materials.

(i) An additional Startup and Roll Test Line, approved in 2014 for construction.

(j) Engine assembly -

(1) One (1) additional dynamometer gasoline engine testing, where engines are tested prior to installation in the vehicle chassis, approved in 2014 for construction.

(2) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to NESHAP IIII [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.3101, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in Table 2 of 40 CFR Part 63, Subpart IIII in accordance with schedule in 40 CFR 63 Subpart IIII.

E.1.2 Surface Coating of Plastic Parts and Products NESHAP [40 CFR Part 63, Subpart PPPP]

The Permittee which engages in surface coating of plastic parts and products shall comply with the provisions of 40 CFR Part 63, Subpart IIII, in order to comply with 40 CFR Part 63, Subpart PPPP.

E.1.3 Surface Coating of Miscellaneous Metal Parts and Products NESHAP [40 CFR Part 63, Subpart MMMM]

The Permittee which engages in surface coating of miscellaneous metal parts and products shall comply with the provisions of 40 CFR Part 63, Subpart IIII, in order to demonstrate compliance with 40 CFR Part 63, Subpart MMMM.

E.1.4 Automobiles and Light-Duty Trucks NESHAP [40 CFR Part 63, Subpart IIII]

The Permittee which engages in automobiles and light duty trucks production shall comply with the provisions of 40 CFR Part 63, Subpart IIII, as follows:

40 CFR Part 63.3080 - (All new and existing affected units)
40 CFR Part 63.3081 - (All new and existing affected units)
40 CFR Part 63.3082 - (All new and existing affected units)
40 CFR Part 63.3083(b) - (Existing affected units compliance date is April 26, 2007 and new affected units is upon startup)
40 CFR Part 63.3090 - (Emission limits for new affected units)
40 CFR Part 63.3091 - (Emission limits for existing affected units)
40 CFR Part 63.3092 - (New and existing affected units)
40 CFR Part 63.3093 - (New and existing affected units)
40 CFR Part 63.3094 - (New and existing affected units)
40 CFR Part 63.3100 - (New and existing affected units)
40 CFR Part 63.3101 - (New and existing affected units)
40 CFR Part 63.3110 - (Existing affected units initial notification date is 1 year after April 26, 2004 and new affected units 120 days after startup)
40 CFR Part 63.3120 - (New and existing affected units)
40 CFR Part 63.3130 - (New and existing affected units)
40 CFR Part 63.3131 - (New and existing affected units)
40 CFR Part 63.3150 - (New and existing affected units)
40 CFR Part 63.3151 - (New and existing affected units)
40 CFR Part 63.3152 - (New and existing affected units)
40 CFR Part 63.3160 - (New and existing affected units)
40 CFR Part 63.3161 - (New and existing affected units)
40 CFR Part 63.3163 - (New and existing affected units)
40 CFR Part 63.3164 - (New and existing affected units)
40 CFR Part 63.3165 - (New and existing affected units)
40 CFR Part 63.3166 - (New and existing affected units)
40 CFR Part 63.3167 - (New and existing affected units)
40 CFR Part 63.3168 - (New and existing affected units)
40 CFR Part 63.3170 - (New and existing affected units)
40 CFR Part 63.3171 - (New and existing affected units)
40 CFR Part 63.3173 - (New and existing affected units)
40 CFR Part 63.3175 - (New and existing affected units)
40 CFR Part 63.3176 - (New and existing affected units)
Table 1 to Subpart IIII - (New and existing affected units)

Table 2 to Subpart IIII - (New and existing affected units)
Table 3 to Subpart IIII - (New and existing affected units)
Appendix A to Subpart IIII - (New and existing affected units)

Compliance Determination Requirements [326 IAC 2-7-5(1)]

E.1.5 Testing Requirements [326IAC 2-1.1-11] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In order to document the compliance status with Condition E.1.4, the Permittee shall perform the testing required under 40 CFR Part 63, Subpart IIII, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition

SECTION E.2 **NSPS**

Emissions Unit Description:

(a) Electrodeposition Coating of Vehicle Bodies (ED Coating Line), identified as Unit 001, with a capacity of 71 units per hour, constructed in 1989 and modified in 2009 and 2010. Approved in 2012 for modification to increase vehicle holding/storage area to allow more vehicles to be coated hour, in subsequent operations consisting of the following units:

(1) One (1) ED Body Pretreatment area;

(2) One (1) ED Pretreatment Drying Oven, with one (1) insignificant natural gas indirect fired burner with a heat input capacity of 6.0 MMBtu/hr;

(3) One (1) insignificant boiler for paint temperature control, with a heat input capacity of 4.0 MMBtu/hr;

(4) Six (6) insignificant pretreatment boilers for warming water surrounding the ED Body Coating Tank, with a total heat input capacity of 9.0 MMBtu/hr;

(5) One (1) ED Body Coating Tank, utilizing dipping as the method of application;

(6) One (1) ED Body Oven (pretreatment drying oven) rated at 6.0 MMBtu/hr, with five (5) natural gas-fired burners (oven zones #1 through #5) each is rated at 2.5 MMBtu/hr, using a 2.5 MMBtu/hr natural gas-fired catalytic oxidizer (B-ED) as VOC control, and exhausting to one (1) stack, identified as B-ED Inc. (emissions from the entrance to, and exit from, the ED Body Oven use no controls and exhaust to one (1) stack, identified as B-ED Hood Exhaust);

(7) One (1) ED Body Cool Down area; and

(8) One (1) paint storage room

(c) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, and modified in 2006, 2008, 2009, and 2010, consisting of the following units:

(1) One (1) Topcoat #1 Booth, approved in 2016 to replace existing spray applicators with automated electrostatic bell type spray applicators, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of 2.5 MMBtu/hr.

(2) One (1) Topcoat #1 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/h and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(3) One (1) Topcoat #1 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(4) One (1) Topcoat #1 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-1 Inc. (emissions from the entrance to and exit from the Topcoat #1 Oven are not controlled and exhaust to one (1) stack, identified as TC-1 Ex.). The oven is equipped with a purge

exhaust stack;

(5) One (1) Topcoat #1 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-1 O.Cl.;

(6) One (1) Topcoat #2 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to ten (10) stacks, identified as TC2-1 through TC2-10. One (1) natural gas-fired dry off oven between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr;

(7) One (1) Topcoat #2 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/hr and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(8) One (1) Topcoat #2 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(9) One (1) Topcoat #2 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-2 Inc. (emissions from the entrance to and exit from the Topcoat #2 Oven are not controlled and exhaust to one (1) stack, identified as TC-2 Ex.). The oven is equipped with a purge exhaust stack;

(10) One (1) Topcoat #2 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-2;

(11) One (1) Topcoat #3 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to five (5) stacks, identified as TUT-1 through TUT-5;

(12) One (1) Topcoat #3 Booth Preheat, with two (2) natural gas-fired burners (oven zones #1 and #2), one (1) with a heat input capacity of 1.5 MMBtu/hr and one (1) with a heat input capacity of 2.5 MMBtu/hr;

(13) One (1) Topcoat #3 Booth Reheat, with one (1) insignificant 1.5 MMBtu/hr natural gas-fired burner (oven zone #3);

(14) One (1) Topcoat #3 Booth Oven, approved in 2013 for modification, with four (4) insignificant natural gas-fired burners with a total maximum heat input capacity of 8.55 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2. The oven is equipped with a purge exhaust stack;

(15) One (1) Topcoat #3 Booth Cool Down area;

(16) One (1) Topcoat #3 Booth natural gas indirect fired flash zone heater between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr, permitted in 2010 for construction; and

(17) Main paint mix room.

(d) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010, Approved in 2012 for modification to include alterations to the conveyor system that will add storage capacity to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) Intermediate Working Stage burner (oven zone #1), with a heat input capacity of 2.5 MMBtu/hr;

(2) One (1) Intermediate Coating Booth, utilizing, two (2) robots for the application of anti-chip (ACC), two (2) manual air assisted spray guns for the application of primer on inner doors for certain colors, followed by the exterior robot e-stat painting process, using a water wash as particulate control, and exhausting to six (6) stacks, identified as SUR-2 through SUR-7;

(3) One (1) Intermediate Booth Preheat (oven zones #2 and #3), with two (2) natural gas-fired burners, each with a heat input capacity of 2.5 MMBtu/hr;

(4) One (1) Intermediate Booth Reheat burner (oven zone #4), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(5) One (1) Intermediate Coating Oven, with five (5) insignificant natural gas direct fired burners totaling 12.42 MMBtu/hr, using a 1.0 MMBtu/hr natural gas-fired catalytic incinerator (SUR) as VOC control, and exhausting to one (1) stack, identified as SUR-1 (emissions from the entrance to and exit from the Intermediate Coating Oven use no controls and exhaust to one (1) stack, identified as Surfacer Hood Exhaust);

(6) One (1) Intermediate Cool Down area, using no controls, and exhausting to one (1) stack, identified as Surfacer Cooling; and

(7) Main paint mix room.

Paint Coating Line System C

(a) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through13-9, consisting of the following units:

(1) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, comprised of six (6) units with a maximum heat input capacity of 1.3 million British thermal units per hour (MMBtu/hr) each and a total maximum heat input of 7.8 MMBtu/hr permitted in 2016 for construction.

(2) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(3) One (1) ED Oven (pretreatment drying oven, with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(4) One (1) ED Body Cool Down Area.

(5) One (1) ED Deck and ED Sand Area.

(6) One (1) Paint Storage Room.

(7) One (1) Working Stage Air House #1 to support the Prep Deck and Offline Areas rated at 11.0 MMBtu/hr, permitted in 2016 for construction.

(8) One (1) Working Stage Air House RFH to support the Surfacer Sand, Wet Sand #1 and #2, ED Sand, Sealer and PVC Area with no heating components.

(d) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(1) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Intermediate Coating Oven, with a maximum heat input capacity of 10.1 MMBtu/hr, with no VOC control, permitted in 2016 for construction.

(3) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at 2.5MMBtu/hr, permitted in 2016 for construction.

(4) One (1) Intermediate (Surfacer) Air House rated at 26.5 MMBtu/hr. permitted in 2016 for construction.

(5) One (1) Intermediate Cool Down Area, using no controls.

(6) One (1) main paint mix room.

(d) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-1 through 16-26, consisting of the following

(1) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of 7.6 MMBtu/hr, using a 0.99 MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control, permitted in 2016 for construction.

(3) One (1) Topcoat natural gas-fired flash zone heater rated at 2.5 MMBtu/hr, permitted in 2016 for construction.

(4) One (1) Topcoat #C1 Cool Down Area, using no controls.

(5) One (1) main paint mix room.

(6) One (1) Topcoat Air House rated at 42.0 MMBtu/hr, permitted in 2016 for construction.

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(7) One (1) Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

SECTION E.2 **NSPS**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.2.1 General Provisions Relating to NSPS MM [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 60, Subpart MM.

E.2.2 Automobiles and Light-Duty Trucks NSPS [40 CFR Part 60, Subpart MM]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart MM (included as Attachment A of the operating permit), which are incorporated by reference as 326 IAC 12-1, for the units listed above:

40 CFR Part 60.390
40 CFR Part 60.391
40 CFR Part 60.392
40 CFR Part 60.393
40 CFR Part 60.394
40 CFR Part 60.395
40 CFR Part 60.396
40 CFR Part 60.397

Compliance Determination Requirements [326 IAC 2-7-5(1)]

E.2.3 Testing Requirements [326IAC 2-1.1-11] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In order to document the compliance status with Condition E.2.2, the Permittee shall perform the testing required under 40 CFR Part 60, Subpart MM, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

SECTION E.3 **NESHAP**

Emissions Unit Description:

(j) Six (6) storage tanks, identified collectively as Unit 011, approved in 2014 to increase utilization to accommodate the increase in production capacity from 310,000 vehicles per year to 450,000 vehicles per year, which includes the following equipment:

(1) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(2) Waste purge thinner storage tank, with a capacity of 6,000 gallons, constructed in 1992;

(3) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 2005;

(4) Windshield washer fluid storage tank, with a capacity of 5,000 gallons, constructed in 1988.

(5) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(i) One (1) power steering fluid storage tank, with a capacity of 5,000 gallons, installed in 1988.

(ii) One (1) transmission oil storage tank, with a capacity of 5,000 gallons, installed in 1988.

(iii) One (1) Antifreeze storage tank, with a capacity of 10,000 gallons, installed in 1988.

(iv) One (1) Antifreeze storage tank, with a capacity of 12,000 gallons, installed in 1988.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.3.1 General Provisions Relating to NESHAP EEEE [40 CFR Part 63, Subpart A]

The Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions which are incorporated by reference as 326 IAC 20-1-1, as specified in Table 12 to Subpart EEEE of Part 63 in accordance with schedule in 40 CFR 63 Subpart EEEE

E.3.2 National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)

The Permittee shall comply with the following provisions of this 40 CFR 63, Subpart EEEE (included as Attachment C of the operating permit), which are incorporated by reference as 326 IAC 12-1, for the units listed above, upon startup:

40 CFR Part 63.2330
40 CFR Part 63.2334
40 CFR Part 63.2338
40 CFR Part 63.2342(a)(2), (b)(1), (d)
40 CFR Part 63.2343(b), (d)
40 CFR Part 63.2350
40 CFR Part 63.2358(c)(1)(ii)
40 CFR Part 63.2378(a)
40 CFR Part 63.2382(a),(b)(1)
40 CFR Part 63.2386
40 CFR Part 63.2390
40 CFR Part 63.2394
40 CFR Part 63.2398
40 CFR Part 63.2402
40 CFR Part 63.2406
Table 1 to Subpart EEEE - applicable sections
Table 4 to Subpart EEEE - applicable sections
Table 12 to Subpart EEEE

SECTION E.4 NESHAP

Emissions Unit Description:

Permit Section	Emission Unit Name (design and Manufacturer name)	Rated Heat Input Capacity (MMBtu/hr)	Fuels Used
New Emission Unit			
Permit Section D.10(a)(1)	Pretreatment ED Boiler	6 units rated at 1.3 MMBtu/hr each, 7.8 MMBtu/hr total	Natural Gas
Permit Section D.10(a)(1)	Spray Booth Boiler	6 units rated at 1.25 MMBtu/hr each, 7.5 MMBtu/hr total	Natural Gas
Existing Emission Units			
Permit Section D.4 (a) (3)	ED/Paint Temperature Control Boiler Cleaver Brooks (1989)	4.0 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 1 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 2 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 3 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 4 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 5 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 6 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B1-01 Cleaver Brooks (1989)	1.339 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B10-01 Cleaver Brooks (1989)	4.184 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B10-02 Cleaver Brooks (1989)	4.184 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B11-01 Cleaver Brooks (1989)	2.929 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B11-02 Cleaver Brooks (1989)	2.929 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B09-01 Cleaver Brooks (1989)	5.23 MMBtu/Hr	Natural Gas

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.4.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.7565, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the above affected emission units as specified in Table 10 of 40 CFR 63, Subpart DDDDD in accordance with schedule in 40 CFR 63, Subpart DDDDD.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
MC 61-53 IGCN 1003
100 North Senate Avenue
Indianapolis, Indiana 46204

E.4.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters Requirements [40 CFR Part 63, Subpart DDDDD]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD, (included as Attachment D of the operating permit), which are incorporated by 326 IAC 20-1, for the above affected emission units upon startup:

40 CFR § 63.7480
40 CFR § 63.7485
40 CFR § 63.7490(a)(2)
40 CFR § 63.7491
40 CFR § 63.7495(a)
40 CFR § 63.7499
40 CFR § 63.7500(a)(1),(f)
40 CFR § 63.7505(a)
40 CFR § 63.7510(g)
40 CFR § 63.7515(d)
40 CFR § 63.7540(a)(11)
40 CFR § 63.7545(a), (c)
40 CFR § 63.7550(c(1)(5)(i) through (iv), (xiv), (xvii)
40 CFR § 63.7555(a)(1)
40 CFR § 63.7560
40 CFR § 63.7565
40 CFR § 63.7570
40 CFR § 63.7575,
Table 3 to Subpart DDDDD of Part 63 (applicable section)
Table 9 to Subpart DDDDD of Part 63 (applicable section)
Table 10 to Subpart DDDDD of Part 63

SECTION E.5 NSPS

Emissions Unit Description:

Insignificant Activities:

(a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(3) Other insignificant natural gas combustion units approved in 2014 and 2016 for construction: [326 IAC 2-2]

(D) Emergency Equipment:
(1) One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (rated at 636 HP), permitted in 2016 for construction.

(f) Activities associated with emergencies, including the following:

Emergency generators as follows:

(2) Natural gas turbines or reciprocating engines not exceeding sixteen thousand (16,000) horsepower.

(B) One (1) 225 HP natural gas fired emergency engine, installed in 2010.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.5.1 General Provisions Relating to New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines [326 IAC 12-1][40 CFR Part 60, Subpart A] [40 CFR Part 60, Subpart JJJJ]

The provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, apply to the emergency generator, except when otherwise specified in 40 CFR 60, Subpart JJJJ

E.5.2 New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines [40 CFR Part 60, Subpart JJJJ]

(a) The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment E to the operating permit), which are incorporated by reference as 326 IAC 12-1, for the emergency generator upon startup:

(1) 40 CFR §60.4230(4)(iv)
(2) 40 CFR §60.4233(e)
(3) 40 CFR §60.4234
(4) 40 CFR §60.4243
(5) 40 CFR §60.4245

SECTION E.6 NESHAP

Emissions Unit Description:

Insignificant Activities:

(a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(3) Other insignificant natural gas combustion units approved in 2014 and 2016 for construction: [326 IAC 2-2]

(D) Emergency Equipment:
(1) One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (rated at 636 HP), permitted in 2016 for construction.

(f) Activities associated with emergencies, including the following:

Emergency generators as follows:

(1) Diesel generators not exceeding one thousand six hundred (1,600) horsepower.

(A) One 760 HP diesel fueled emergency engine, installed in 1989.

(2) Natural gas turbines or reciprocating engines not exceeding sixteen thousand (16,000) horsepower.

(A) One (1) 180 HP natural gas fired emergency engine, installed in 1997
(B) One (1) 225 HP natural gas fired emergency engine, installed in 2010

Stationary fire pump engines as follows:

(1) Two 375 HP diesel fired emergency fire pumps, installed in 1989.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.6.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the above affected emission units as specified in Table 8of 40 CFR 63, Subpart ZZZZ in accordance with schedule in 40 CFR 63 Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
MC 61-53 IGCN 1003
100 North Senate Avenue
Indianapolis, Indiana 46204

E.6.2 National Emission Standards for Hazardous Air Pollutants: Reciprocating Internal Combustion Engines (RICE) [40 CFR Part 63, Subpart ZZZZ]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment F to the operating permit), which are incorporated by 326 IAC 20-82, for the following emergency units:

One (1) 760 HP diesel fueled emergency generator engine, installed in 1989.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(1)(i)
(4) 40 CFR 63.6595(a)(1), (c) - Must comply with this subpart no later than June 15, 2007
(5) 40 CFR 63.6604(c)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625 (h), (i)
(8) 40 CFR 63.6640(f)(1),(2),(3)
(9) 40 CFR 63.6645(b) - submit initial notification not later than December 13, 2004 for unit with site rating >500 HP that started operation before the effective date of this subpart
(10) 40 CFR 63.6650
(11) 40 CFR 63.6655(a), (d), (e)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2b to Subpart ZZZZ of Part 63,
(18) Table 6 to Subpart ZZZZ of Part 63, item 13
(17) Table 8 to Subpart ZZZZ of Part 63

Two (2) 375 HP diesel fired emergency fire pumps, installed in 1987 and
one (1) 180 HP emergency generator engine, installed in 1997.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(1)(ii)
(4) 40 CFR 63.6595(a)(1), (c) -- Must comply with this subpart no later than May 3, 2013
(5) 40 CFR 63.6604(b)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625 (f), (i)
(8) 40 CFR 63.6640(a), (b), (f)(1),(2),(3)
(9) 40 CFR 63.6645(d) - submit initial notification not later than July 16, 2008 for unit with site rating ≤500 HP that started operation before the effective date of this subpart

(10) 40 CFR 63.6650
(11) 40 CFR 63.6655(a), (d), (e)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2c to Subpart ZZZZ of Part 63, item 1
(17) Table 6 to Subpart ZZZZ of Part 63, item 13
(18) Table 8 to Subpart ZZZZ of Part 63

One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (636 HP), permitted in 2016 for construction.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(2)(i)
(4) 40 CFR 63.6595(a)(3), (c) - Must comply with this subpart upon startup
(5) 40 CFR 63.6605
(6) 40 CFR 63.6625 (h), (j)
(7) 40 CFR 63.6640(f)(1),(2),(3)
(8) 40 CFR 63.6645((c) - submit initial notification not later than 120 days after becoming subject to this subpart.
(9) 40 CFR 63.6650
(10) 40 CFR 63.6655(a), (d)
(11) 40 CFR 63.6660
(12) 40 CFR 63.6665
(13) 40 CFR 63.6670
(14) 40 CFR 63.6675
(15 Table 1a to Subpart ZZZZ of Part 63
(16) Table 1b to Subpart ZZZZ of Part 63
(17) Table 7 to Subpart ZZZZ of Part 63; item 4.
(18) Table 8 to Subpart ZZZZ of Part 63

One (1) 225 HP natural gas fired emergency engine, installed in 2010.

(1) 40 CFR § 63.6590(c).

SECTION E.7 **NESHAP**

Emissions Unit Description:

(j) Engine assembly -

(2) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.7.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the above affected emission units, except as otherwise specified in 40 CFR 63, Subpart PPPPP.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
MC 61-53 IGCN 1003
100 North Senate Avenue
Indianapolis, Indiana 46204

E.7.2 National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands [40 CFR Part 63, Subpart PPPPP]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart PPPPP (included as Attachment G to the operating permit), which are incorporated by 326 IAC 20-1, for the above emission units upon startup:

(1) 40 CFR §63.9280
(2) 40 CFR §63.9285
(3) 40 CFR §63.9290
(4) 40 CFR §63.9295(a)(2)
(5) 40 CFR §63.9300
(6) 40 CFR §63.9301
(7) 40 CFR §63.9302
(8) 40 CFR §63.9305
(9) 40 CFR §63.9306
(10) 40 CFR §63.9307
(11) 40 CFR §63.9310
(12) 40 CFR §63.9320
(13) 40 CFR §63.9321
(14) 40 CFR §63.9330
(15) 40 CFR §63.9335
(16) 40 CFR §63.9340
(17) 40 CFR §63.9345
(18) 40 CFR §63.9350
(19) 40 CFR §63.9355
(20) 40 CFR §63.9360

(21) 40 CFR §63.9365
(22) 40 CFR §63.9370
(23) Table 1 to Subpart PPPPP of Part 63—Emission Limitations
(24) Table 3 to Subpart PPPPP of Part 63—Requirements for Initial Compliance Demonstrations
(25) Table 4 to Subpart PPPPP of Part 63—Initial Compliance With Emission Limitations
(26) Table 5 to Subpart PPPPP of Part 63—Continuous Compliance With Emission Limitations
(27) Table 6 to Subpart PPPPP of Part 63—Requirements for Reports

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36402-00050

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify) _____

☐ Report (specify _____

☐ Notification (specify) _____

☐ Affidavit (specify _____

☐ Other (specify _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Phone:
Date:

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36042-00050

This form consists of 2 pages Page 1 of 2

☐ This is an emergency as defined in 326 IAC 2-7-1(12) The Permittee must notify the Office of Air Quality (OAQ), not later than four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and The Permittee must submit notice in writing or by facsimile not later than two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO2, VOC, NOX, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36402-00050
Facility: Natural gas combustion units at Paint Coating Line Systems A/B
Parameter: Natural Gas Usage (for NOx, PM)
Limit: Less than 2,380 MMCF per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____YEAR:_____

Month	Natural Gas Usage This Month (MMCF)	Natural Gas Usage for Past 11 Months (MMCF)	Total Natural Gas Usage for 12 Month Period (MMCF)

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36402-00050
Facility: Source-wide (Paint Coating Line Systems A/B and C)
Parameter: # vehicles produced
Limit: Less than 450,000 vehicles per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____YEAR:_____

Month	Vehicle Production This Month(# vehicles)	Vehicle Production for Past 11 Months (# vehicles)	Total Vehicle Production for 12 Month Period (# vehicles)

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Report

Source Name:	Subaru of Indiana Automotive, Inc.
Source Address:	5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.:	T157-36042-00050
Facility:	Surface coating operations, associated purge solvent operations and wiping/cleaning solvents, and storage at Paint Coating Line Systems A/B
Parameter:	VOC Emissions
Limit:	Shall not exceed 1,084.5 tons VOC per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____YEAR:

Month	VOC Emissions This Month (tons)	VOC Emissions for Past 11 Months (tons)	VOC Emissions for 12 Month Period (tons)

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	Subaru of Indiana Automotive, Inc.
Source Address:	5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.:	T157-36042-00050
Facility:	Paint Coating Line Systems A/B - PVC #1 Coating Booth, PVC #2 Coating Booth Topcoat #1 Coating Booth, Topcoat #2 Coating Booth, Topcoat #3 Coating Booth, Intermediate (Surfacer) Coating Booth, Plastic Bumper Coating Booth, Black Coat and Wax Booth, Anticorrosion Coating Booth, Touchup IPC Coating Booth, source-wide natural gas combustion, and all insignificant facilities that were permitted by the PSD (79) 1651 Revision.
Parameter:	PM/PM10 Emissions
Limit:	Less than 23.1 tons PM/PM10 per twelve (12) consecutive month period with compliance determined at the end of each month, using the equation contained in Condition D.1.4 of this permit.

QUARTER: _____YEAR:_____

Month	PM/PM10 Emissions This Month (tons)	PM/PM10 Emissions for Past 11 Months (tons)	PM/PM10 Emissions for 12 Month Period (tons)

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36042-00050
Facility: Natural gas combustion units associated with the Fascia Paint Line and the 2.5 MMBtu/hr dry off oven added to the existing Topcoat, Unit 003.
Parameter: Natural Gas Usage (for VOC emissions)
Limit: Shall not exceed 166.4 million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____YEAR:_____

FORM 1

Month	Natural Gas Usage This Month (MMCF)	Natural Gas Usage for Past 11 Months (MMCF)	Total Natural Gas Usage for 12 Month Period (MMCF)

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36042-00050
Facility: Fascia Paint Line (PFPLS#2), wiping/cleaning solvents, and solvent purging
Parameter: VOC Emissions and Solvent Usage
Limit: VOC emissions from the fascia paint line on this report (FORM 2), combined with the VOC emissions from the natural gas combustion devices on FORM 1 shall not exceed 102.6 tons per year.
Purge solvent and wiping/cleaning solvents shall not exceed 24.2 tons VOC per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER _____YEAR _____

FORM 2

Month	Total VOC Emissions This Month (tons)	Total VOC Emissions for Past 11 Months (tons)	Total VOC Emissions for 12 Month Period (tons)

Month	Purge Solvents				Purge Solvents				Purge Solvents			
	Solvent Usage for This Month (gallons)	Captured/ Collected This Month (gallons)	Wiping/ Cleaning Solvent Used This Month (gallons)	Total VOC Emitted This Month	Solvent Usage for Past 11 Months (gallons)	Captured/ Collected for Past 11 Months (gallons)	Wiping/ Cleaning Solvent Used Past 11 Months (gallons)	Total VOC Emitted for Past 11 Months	Solvent Usage for 12 Month Period (gallons)	Captured/ Collected for 12 Month Period (gallons)	Wiping/ Cleaning Solvent Used Past 11 Months (gallons)	Total VOC Emitted for 12 Month Period
Month 1												
Month 2												
Month 3												

Note: VOC emissions from the fascia paint line on this report (FORM 2), combined with the VOC emissions from the natural gas combustion devices on FORM 1 (page 89 of 98 of this permit) shall not exceed 102.6 tons per year.

Submitted by:_____ Date: _____
Title / Position:_____ Phone: _____
Signature:_____

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36042-00050
Facility: Topcoat System, identified as Unit 003
Parameter: VOC Usage
Limit: Shall not exceed 393 tons VOC per twelve (12) consecutive month period with compliance determined at the end of each month.

Quarter: _____ Year: _____

Month	VOC Usage This Month (tons)	VOC Usage Past 11 Months (tons)	Total VOC Usage 12 Month Period (tons)

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36402-00050
Facilities: ED Coating Line, Unit 001
Parameter: Actual VOC Content
Daily Limit: ED Coating Line - 0.4 pounds of VOC/gallon of applied coating solids (lb/gacs); on a daily basis

Month: _____ Year: _____

Day	Daily VOC Usage (lb/gacs)	Day	Daily VOC Usage (lb/gacs)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16		no. of deviations	

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36402-00050
Facilities: Topcoat #1 Booth, Topcoat #2 Booth, Topcoat #3 Booth, Intermediate Coating Booth
Parameter: Actual VOC Content
Limits: For Combined Topcoat #1 Booth, Topcoat #2 Booth - 12.3 pounds of VOC/gallon of applied coating solids (lb/gacs); based on a daily volume weighted average.
For Topcoat #3 Booth – 10.6 lbs/gacs, based on a daily volume weighted average.
For Intermediate Coating Booth – 8.76 lbs/gacs, based on a daily volume weighted average.

Month: _____ Year: _____

Day	Combined Daily Volume Weighted Average VOC Usage for Topcoat #1 Booth, Topcoat #2 Booth (lbs/gacs)	Daily Volume Weighted Average VOC Usage for Topcoat #3 Booth (lbs/gacs)	Daily Volume Weighted Average VOC Usage for Intermediate Coating Booth (lbs/gacs)	Day	Combined Daily Volume Weighted Average VOC Usage for Topcoat #1 Booth, Topcoat #2 Booth (lbs/gacs)	Daily Volume Weighted Average VOC Usage for Topcoat #3 Booth (lbs/gacs)	Daily Volume Weighted Average VOC Usage for Intermediate Coating Booth (lbs/gacs)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				no. of deviations			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____ Date: _____
Title/Position: _____ Phone: _____
Signature: _____

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36402-00050
Facilities: Trim Line, Unit 010
Parameter: Actual VOC Content
Limits: For Trim Line, unit 010 window installation adhesives and other materials - 0.40 pounds of VOC per gallon of coating, as applied, based on a monthly volume weighted average

For all the other adhesives and sealers used in the Trim Line, unit 010, excluding window installation materials - 0.30 pounds of VOC per gallon of coating, as applied based on a monthly volume weighted average

Quarter: _____ Year: _____

Operation	Month: _____ Volume Weighted Average VOC Usage (pounds of VOC/gallon as applied)	Month: _____ Volume Weighted Average VOC Usage (pounds of VOC/gallon as applied)	Month: _____ Volume Weighted Average VOC Usage (pounds of VOC/gallon as applied)
Trim Line - Unit 010 Window Installation Adhesives			
Trim Line, unit 010- All Other Adhesives Excluding Window Installation Adhesives			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36402-00050
Facilities: Sealing and PVC Undercoating Line, identified as Unit 002 (PVC Coating Booths #1 and #2)
Parameter: Actual VOC Content
Limit: Sealing and PVC Undercoating Line, Unit 002 (PVC Coating Booths #1 and #2) – 0.30 lbs/gacs, based on a daily volume weighted average

Month: _____ Year: _____

Day	Daily Volume Weighted Average VOC Usage for Sealing and PVC Undercoating Line, Unit 002 (lbs/gacs)	Day	Daily Volume Weighted Average VOC Usage for Sealing and PVC Undercoating Line, Unit 002 (lbs/gacs)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16		no. of deviations	

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36402-00050
Facilities: PBL Coating Booth
Parameter: Actual VOC Content
Limit: PBL Coating Booth – 38.2 lbs/gacs, based on a daily volume weighted average

Month: _____ Year: _____

Day	Daily Volume Weighted Average VOC Usage for PBL Coating Booth (lbs/gacs)	Day	Daily Volume Weighted Average VOC Usage for PBL Coating Booth (lbs/gacs)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16		no. of deviations	

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36042-00050
Facility: Natural gas combustion units at Paint Coating Line System C
Parameter: Natural Gas Usage (for CO, NOx, PM10, PM 2.5)
Limit: Less than 751 MMCF per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____YEAR:_____

Month	Natural Gas Usage This Month (MMCF)	Natural Gas Usage for Past 11 Months (MMCF)	Total Natural Gas Usage for 12 Month Period (MMCF)

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36042-00050
Facility: Paint Coating Line System C
Parameter: # vehicles produced
Limit: Less than 160,000 vehicles per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____YEAR:_____

Month	Vehicle Production This Month(# vehicles)	Vehicle Production for Past 11 Months (# vehicles)	Total Vehicle Production for 12 Month Period (# vehicles)

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36042-00050
Facility: Surface coating operations, associated purge solvent operations and wiping/cleaning solvents, and storage at Paint Coating Line System C
Parameter: VOC Emissions
Limit: Shall not exceed 766.2 tons VOC per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: _____YEAR:

Month	VOC Emissions This Month (tons)	VOC Emissions for Past 11 Months (tons)	VOC Emissions for 12 Month Period (tons)

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	Subaru of Indiana Automotive, Inc.
Source Address:	5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.:	T157-36042-00050
Facility:	Paint Coating Line System C - ED Coating, Unit 013 PM, PM10, PM2.5, Sealing, LASD (Liquid Applied Sound Deadener Coating, Unit 014 PM, PM10, PM2.5, Intermediate Surfacer, Unit 015 PM, PM10, PM2.5, Topcoat, Unit 017 PM, PM10, PM2.5, Anticorrosion Coating (Trim and Final Assembly), Unit 017 PM, PM10, PM2.5, Black and Wax Booth, Unit 017 PM, PM10, PM2.5, Plastic Bumper Coating PM, PM10, PM2.5, Natural Gas Combustion units PM, PM10, PM2.5 at Paint Coating Line System C and PTE change from modified Plastic Bumper Booth 005B, Final Repair, Unit 007, and Trim Line, Unit 010 at paint Line Coating Systems A/B
Parameter:	PM, PM10, PM2.5 Emissions
Limit:	Less than 25 tons of PM per twelve consecutive month period, less than 15 tons of PM10 per twelve consecutive month period and less than 10 tons of PM2.5 per twelve consecutive month period required in D.9.2 of this permit.

QUARTER: _____YEAR:_____

Month	PM Emissions This Month (tons)	PM10 Emissions This Month (tons)	PM2.5 Emissions This Month (tons)	PM Emissions for Past 11 Months (tons)	PM10 Emissions for Past 11 Months (tons)	PM2.5 Emissions for Past 11 Months (tons)	PM Emissions for 12 Month Period (tons)	PM10 Emissions for 12 Month Period (tons)	PM2.5 Emissions for 12 Month Period (tons)

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36042-00050
Facilities: ED Coating Line, Unit 013
Parameter: Actual VOC Content
Daily Limit: ED Coating Line - 1.15 pounds of VOC/gallon of applied coating solids (lb/gacs); on a daily basis

Month: _____ Year: _____

Day	Daily VOC Usage (lb/gacs)	Day	Daily VOC Usage (lb/gacs)
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16		no. of deviations	

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36042-00050
Facilities: Topcoat System "C1", identified as Unit 016 using Option A
Parameter: VOC
Limits: Less than 10.96 pounds per gallon applied coating solids (lb/gacs), based on a daily volume weighted average.

Month: _____ Year: _____

Day	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Day	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				no. of deviations			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____Date:_____
Title/Position: _____ Phone:_____
Signature: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36042-00050
Facilities: Intermediate Surfacer, identified as Unit 015 when using Option A
Parameter: VOC
Limits: Less than 4.8 pounds per gallon applied coating solids (lb/gacs), based on a daily volume weighted average.

Month: _____ Year: _____

Day	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Day	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				no. of deviations			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____Date:_____
Title/Position: _____ Phone:_____
Signature: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36042-00050
Facilities: Combined VOC emissions from the Intermediate Surfacer, identified as Unit 015/Topcoat, Unit 016 when using Option B ("wet on wet" system)
Parameter: VOC
Limits: Less than 10.41 pounds per gallon applied coating solids (lb/gacs), based on a daily volume weighted average.

Month: _____ Year: _____

Day	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Day	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)	Daily Volume Weighted Average VOC Usage (lbs/gacs)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				no. of deviations			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____Date:_____
Title/Position: _____ Phone:_____
Signature: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36042-00050
Facilities: Sealer, LASD and PVC Undercoating Line, identified as Unit 014
Parameter: VOC
Limits: Less than 0.38 pounds per gallon applied coating (lb/gal), based on a daily volume weighted average.

Month: _____ Year: _____

Day	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Day	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				no. of deviations			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____Date:_____
Title/Position: _____ Phone:_____
Signature: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36042-00050
Facilities: Black and Wax Booth, Unit 017
Parameter: VOC
Limits: Pthalic Black = 1.0 lb/gal, Inner Wax = 3.5 lb/gal based on a daily volume weighted average.

Month: _____ Year: _____

Day	Daily Volume Weighted Average VOC Usage for (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Day	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				no. of deviations			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____Date:_____
Title/Position: _____ Phone:_____
Signature: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36042-00050
Facilities: Anticorrosion Wax Booth, Unit 017
Parameter: VOC
Limits: Less than 2.51 pounds per gallon applied coating (lb/gal), based on a daily volume weighted average.

Month: _____ Year: _____

Day	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Day	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				no. of deviations			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____Date:_____
Title/Position: _____ Phone:_____
Signature: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Usage Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana
Part 70 Permit No.: T 157-36042-00050
Facilities: Plastic Bumper Coating Line (PBL-C), Unit 018 and Unit 005B at Paint Coating Line A/B
Parameter: VOC
Limits: Primer coatings - limited to less than 0.71 pounds per gallon based on a daily volume weighted average.
Basecoat coatings - limited to less than 1.38 pounds per gallon, based on a daily volume weighted average.
Clearcoat coatings - limited to less than 4.09 pounds per gallon, based on a daily volume weighted average

Month: _____ Year: _____

Day	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Day	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)	Daily Volume Weighted Average VOC Usage (lbs/gal)
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16				no. of deviations			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____Date:_____
Title/Position: _____ Phone:_____
Signature: _____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
Part 70 Quarterly Report

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36042-00050
Facility: Paint Coating Line System C, wiping/cleaning solvents, and solvent purging
Parameter: VOC Usage
Limit: VOC usage from paint line cleaning/purge solvents minus the amount of VOC in the purge material collected associated with the Purge Solvent Usage and Capture System, Unit 019 shall be limited to less than 83.8 tons per twelve consecutive month period with compliance determined at the end of each month

The annual VOC usage for wiping solvents and clean up materials shall be limited to less than 15.2 tons per twelve consecutive month period with compliance determined at the end of each month

QUARTER _____YEAR _____

	Purge Solvents				Purge Solvents				Purge Solvents			
Month	Solvent Usage for This Month (gallons)	Captured/ Collected This Month (gallons)	Wiping/ Cleaning Solvent Used This Month (gallons)	Total VOC Emitted This Month	Solvent Usage for Past 11 Months (gallons)	Captured/ Collected for Past 11 Months (gallons)	Wiping/ Cleaning Solvent Used Past 11 Months (gallons)	Total VOC Emitted for Past 11 Months	Solvent Usage for 12 Month Period (gallons)	Captured/ Collected for 12 Month Period (gallons)	Wiping/ Cleaning Solvent Used Past 11 Months (gallons)	Total VOC Emitted for 12 Month Period

Submitted by:_____ Date: _____
Title / Position:_____ Phone: _____
Signature:_____

DRAFT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
Part 70 Permit No.: T157-36042-00050

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C - General Reporting. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked “No deviations occurred this reporting period”.	
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD	
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Submitted by: _____

Title / Position:_____

Date: _____

Phone:_____

Title 40: Protection of Environment
PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart MM—Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations

Source: 45 FR 85415, Dec. 24, 1980, unless otherwise noted.

§60.390 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to the following affected facilities in an automobile or light-duty truck assembly plant: each prime coat operation, each guide coat operation, and each topcoat operation.

(b) Exempted from the provisions of this subpart are operations used to coat plastic body components or all-plastic automobile or light-duty truck bodies on separate coating lines. The attachment of plastic body parts to a metal body before the body is coated does not cause the metal body coating operation to be exempted.

(c) The provisions of this subpart apply to any affected facility identified in paragraph (a) of this section that begins construction, reconstruction, or modification after October 5, 1979.

§60.391 Definitions.

(a) All terms used in this subpart that are not defined below have the meaning given to them in the Act and in subpart A of this part.

Applied coating solids means the volume of dried or cured coating solids which is deposited and remains on the surface of the automobile or light-duty truck body.

Automobile means a motor vehicle capable of carrying no more than 12 passengers.

Automobile and light-duty truck body means the exterior surface of an automobile or light-duty truck including hoods, fenders, cargo boxes, doors, and grill opening panels.

Bake oven means a device that uses heat to dry or cure coatings.

Electrodeposition (EDP) means a method of applying a prime coat by which the automobile or light-duty truck body is submerged in a tank filled with coating material and an electrical field is used to effect the deposition of the coating material on the body.

Electrostatic spray application means a spray application method that uses an electrical potential to increase the transfer efficiency of the coating solids. Electrostatic spray application can be used for prime coat, guide coat, or topcoat operations.

Flash-off area means the structure on automobile and light-duty truck assembly lines between the coating application system (dip tank or spray booth) and the bake oven.

Guide coat operation means the guide coat spray booth, flash-off area and bake oven(s) which are used to apply and dry or cure a surface coating between the prime coat and topcoat operation on the components of automobile and light-duty truck bodies.

Light-duty truck means any motor vehicle rated at 3,850 kilograms gross vehicle weight or less, designed mainly to transport property.

Plastic body means an automobile or light-duty truck body constructed of synthetic organic material.

Plastic body component means any component of an automobile or light-duty truck exterior surface constructed of synthetic organic material.

Prime coat operation means the prime coat spray booth or dip tank, flash-off area, and bake oven(s) which are used to apply and dry or cure the initial coating on components of automobile or light-duty truck bodies.

Purge or *line purge* means the coating material expelled from the spray system when clearing it.

Solids Turnover Ratio (R_T) means the ratio of total volume of coating solids that is added to the EDP system in a calendar month divided by the total volume design capacity of the EDP system.

Solvent-borne means a coating which contains five percent or less water by weight in its volatile fraction.

Spray application means a method of applying coatings by atomizing the coating material and directing the atomized material toward the part to be coated. Spray applications can be used for prime coat, guide coat, and topcoat operations.

Spray booth means a structure housing automatic or manual spray application equipment where prime coat, guide coat, or topcoat is applied to components of automobile or light-duty truck bodies.

Surface coating operation means any prime coat, guide coat, or topcoat operation on an automobile or light-duty truck surface coating line.

Topcoat operation means the topcoat spray booth, flash-off area, and bake oven(s) which are used to apply and dry or cure the final coating(s) on components of automobile and light-duty truck bodies.

Transfer efficiency means the ratio of the amount of coating solids transferred onto the surface of a part or product to the total amount of coating solids used.

VOC content means all volatile organic compounds that are in a coating expressed as kilograms of VOC per liter of coating solids.

Volume Design Capacity of EDP System (LE) means the total liquid volume that is contained in the EDP system (tank, pumps, recirculating lines, filters, etc.) at its designed liquid operating level.

Waterborne or *water reducible* means a coating which contains more than five weight percent water in its volatile fraction.

(b) The nomenclature used in this subpart has the following meanings:

C_{aj} = concentration of VOC (as carbon) in the effluent gas flowing through stack (j) leaving the control device (parts per million by volume),

C_{bi} = concentration of VOC (as carbon) in the effluent gas flowing through stack (i) entering the control device (parts per million by volume),

C_{fk} = concentration of VOC (as carbon) in the effluent gas flowing through exhaust stack (k) not entering the control device (parts per million by volume),

D_{ci} = density of each coating (i) as received (kilograms per liter),

D_{dj} = density of each type VOC dilution solvent (j) added to the coatings, as received (kilograms per liter),

D_r = density of VOC recovered from an affected facility (kilograms per liter),

E = VOC destruction or removal efficiency of the control device,

F = fraction of total VOC which is emitted by an affected facility that enters the control device,

G = volume weighted average mass of VOC per volume of applied solids (kilograms per liter),

L_{ci} = volume of each coating (i) consumed, as received (liters),

L_{cil} = Volume of each coating (i) consumed by each application method (l), as received (liters),

L_{dj} = volume of each type VOC dilution solvent (j) added to the coatings, as received (liters),

L_r = volume of VOC recovered from an affected facility (liters),

L_s = volume of solids in coatings consumed (liters),

L_E = the total volume of the EDP system (liters),

M_d = total mass of VOC in dilution solvent (kilograms),

M_0 = total mass of VOC in coatings as received (kilograms),

M_r = total mass of VOC recovered from an affected facility (kilograms),

N = volume weighted average mass of VOC per volume of applied coating solids after the control device

$$\frac{kilograms\ of\ VOC}{liter\ of\ applied\ solids},$$

Q_{aj} = volumetric flow rate of the effluent gas flowing through stack (j) leaving the control device (dry standard cubic meters per hour),

Q_{bi} = volumetric flow rate of the effluent gas flowing through stack (i) entering the control device (dry standard cubic meters per hour),

Q_{fk} = volumetric flow rate of the effluent gas flowing through exhaust stack (k) not entering the control device (dry standard cubic meters per hour),

T = overall transfer efficiency,

T_l = transfer efficiency for application method (*l*),

V_{si} = proportion of solids by volume in each coating (i) as received

$$\frac{liter\ solids}{liter\ coating}, and$$

W_{oi} = proportion of VOC by weight in each coating (i), as received

$$\frac{kilograms\ VOC}{kilograms\ coating}$$

[45 FR 85415, Dec. 24, 1980, as amended at 59 FR 51386, Oct. 11, 1994; 65 FR 61760, Oct. 17, 2000]

§60.392 Standards for volatile organic compounds.

On and after the date on which the initial performance test required by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any affected facility VOC emissions in excess of:

(a) Prime Coat Operation. (1) For each EDP prime coat operation:

(i) 0.17 kilogram of VOC per liter of applied coating solids when R_T is 0.16 or greater.

(ii) $0.17 \times 350\ (^{0.160-R}{}_{T})$ kg of VOC per liter of applied coating solids when R_T is greater than or equal to 0.040 and less than 0.160.

(iii) When R_T is less than 0.040, there is no emission limit.

(2) For each nonelectrodeposition prime coat operation: 0.17 kilogram of VOC per liter of applied coating solids.

(b) 1.40 kilograms of VOC per liter of applied coating solids from each guide coat operation.

(c) 1.47 kilograms of VOC per liter of applied coating solids from each topcoat operation.

[45 FR 85415, Dec. 24, 1980, as amended at 59 FR 51386, Oct. 11, 1994]

§60.393 Performance test and compliance provisions.

(a) Section 60.8 (d) and (f) do not apply to the performance test procedures required by this section.

(b) The owner or operator of an affected facility shall conduct an initial performance test in accordance with §60.8(a) and thereafter for each calendar month for each affected facility according to the procedures in this section.

(c) The owner or operator shall use the following procedures for determining the monthly volume weighted average mass of VOC emitted per volume of applied coating solids.

(1) The owner or operator shall use the following procedures for each affected facility which does not use a capture system and a control device to comply with the applicable emission limit specified under §60.392.

(i) Calculate the volume weighted average mass of VOC per volume of applied coating solids for each calendar month for each affected facility. The owner or operator shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or from data determined by an analysis of each coating, as received, by Method 24. The Administrator may require the owner or operator who uses formulation data supplied by the manufacturer of the coating to determine data used in the calculation of the VOC content of coatings by Method 24 or an equivalent or alternative method. The owner or operator shall determine from company records on a monthly basis the volume of coating consumed, as received, and the mass of solvent used for thinning purposes. The volume weighted average of the total mass of VOC per volume of coating solids used each calendar month will be determined by the following procedures.

(A) Calculate the mass of VOC used in each calendar month for each affected facility by the following equation where “n” is the total number of coatings used and “m” is the total number of VOC solvents used:

$$M_o + M_d = \sum_{i=1}^{n} L_{ci} D_{ci} W_{ci} + \sum_{j=1}^{m} L_{dj} D_{dj}$$

[$_{\Sigma} L_{dj} D_{dj}$ will be zero if no VOC solvent is added to the coatings, as received].

(B) Calculate the total volume of coating solids used in each calendar month for each affected facility by the following equation where “n” is the total number of coatings used:

$$L_s = \sum_{i=1}^{n} L_{ci} V_{si}$$

(C) Select the appropriate transfer efficiency (T) from the following tables for each surface coating operation:

Application method	**Transfer efficiency**
Air Atomized Spray (waterborne coating)	0.39
Air Atomized Spray (solvent-borne coating)	0.50
Manual Electrostatic Spray	0.75
Automatic Electrostatic Spray	0.95
Electrodeposition	1.00

The values in the table above represent an overall system efficiency which includes a total capture of purge. If a spray system uses line purging after each vehicle and does not collect any of the purge material, the following table shall be used:

Application method	**Transfer efficiency**
Air Atomized Spray (waterborne coating)	0.30
Air Atomized Spray (solvent-borne coating)	0.40
Manual Electrostatic Spray	0.62
Automatic Electrostatic Spray	0.75

If the owner or operator can justify to the Administrator's satisfaction that other values for transfer efficiencies are appropriate, the Administrator will approve their use on a case-by-case basis.

(*1*) When more than one application method (*l*) is used on an individual surface coating operation, the owner or operator shall perform an analysis to determine an average transfer efficiency by the following equation where “n” is the total number of coatings used and “p” is the total number of application methods:

$$T = \frac{\sum_{i=1}^{n} T_i V_{si} L_{cil}}{\sum_{l=1}^{p} L_s}$$

(D) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility by the following equation:

$$G = \frac{M_o + M_d}{L_s T}$$

(E) For each EDP prime coat operation, calculate the turnover ratio (R_T) by the following equation:

$$R_T = \frac{L_S}{L_B}, \text{ truncated after 3 decimal places.}$$

Then calculate or select the appropriate limit according to §60.392(a).

(ii) If the volume weighted average mass of VOC per volume of applied coating solids (G), calculated on a calendar month basis, is less than or equal to the applicable emission limit specified in §60.392, the affected facility is in compliance. Each monthly calculation is a performance test for the purpose of this subpart.

(2) The owner or operator shall use the following procedures for each affected facility which uses a capture system and a control device that destroys VOC (e.g., incinerator) to comply with the applicable emission limit specified under §60.392.

(i) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility as described under §60.393(c)(1)(i).

(ii) Calculate the volume weighted average mass of VOC per volume of applied solids emitted after the control device, by the following equation: N = G[1-FE]

(A) Determine the fraction of total VOC which is emitted by an affected facility that enters the control device by using the following equation where “n” is the total number of stacks entering the control device and “p” is the total number of stacks not connected to the control device:

$$\sum_{i=1}^{n}$$

If the owner can justify to the Administrator's satisfaction that another method will give comparable results, the Administrator will approve its use on a case-by-case basis.

(*1*) In subsequent months, the owner or operator shall use the most recently determined capture fraction for the performance test.

(B) Determines the destruction efficiency of the control device using values of the volumetric flow rate of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation where “n” is the total number of stacks entering the control device and “m” is the total number of stacks leaving the control device:

$$E = \frac{\sum_{i=1}^{n} Q_{bi} C_{bi} - \sum_{j=1}^{m} Q_{aj} C_{aj}}{\sum_{i=1}^{n} Q_{bi} C_{bi}}$$

(*1*) In subsequent months, the owner or operator shall use the most recently determined VOC destruction efficiency for the performance test.

(C) If an emission control device controls the emissions from more than one affected facility, the owner or operator shall measure the VOC concentration (C_{bi}) in the effluent gas entering the control device (in parts per million by volume) and the volumetric flow rate (Q_{bi}) of the effluent gas (in dry standard cubic meters per hour) entering the device through each stack. The destruction or removal efficiency determined using these data shall be applied to each affected facility served by the control device.

(iii) If the volume weighted average mass of VOC per volume of applied solids emitted after the control device (N) calculated on a calendar month basis is less than or equal to the applicable emission limit specified in §60.392, the affected facility is in compliance. Each monthly calculation is a performance test for the purposes of this subpart.

(3) The owner or operator shall use the following procedures for each affected facility which uses a capture system and a control device that recovers the VOC (e.g., carbon adsorber) to comply with the applicable emission limit specified under §60.392.

(i) Calculate the mass of VOC ($M_o + M_d$) used during each calendar month for each affected facility as described under §60.393(c)(1)(i).

(ii) Calculate the total volume of coating solids (L_s) used in each calendar month for each affected facility as described under §60.393(c)(1)(i).

(iii) Calculate the mass of VOC recovered (M_r) each calendar month for each affected facility by the following equation: $M_r = L_r D_r$

(iv) Calculate the volume weighted average mass of VOC per volume of applied coating solids emitted after the control device during a calendar month by the following equation:

$$N = \frac{M_o + M_d - M_r}{L_s T}$$

(v) If the volume weighted average mass of VOC per volume of applied solids emitted after the control device (N) calculated on a calendar month basis is less than or equal to the applicable emission limit specified in §60.392, the affected facility is in compliance. Each monthly calculation is a performance test for the purposes of this subpart.

[45 FR 85415, Dec. 24, 1980, as amended at 59 FR 51387, Oct. 11, 1994; 65 FR 61760, Oct. 17, 2000]

§60.394 Monitoring of emissions and operations.

The owner or operator of an affected facility which uses an incinerator to comply with the emission limits specified under §60.392 shall install, calibrate, maintain, and operate temperature measurement devices as prescribed below:

(a) Where thermal incineration is used, a temperature measurement device shall be installed in the firebox. Where catalytic incineration is used, a temperature measurement device shall be installed in the gas stream immediately before and after the catalyst bed.

(b) Each temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ±5 percent of the temperature being measured expressed in degrees Celsius or ±2.5 °C.

(c) Each temperature measurement device shall be equipped with a recording device so that a permanent record is produced.

§60.395 Reporting and recordkeeping requirements.

(a) Each owner or operator of an affected facility shall include the data outlined in paragraphs (a)(1) and (2) in the initial compliance report required by §60.8.

(1) The owner or operator shall report the volume weighted average mass of VOC per volume of applied coating solids for each affected facility.

(2) Where compliance is achieved through the use of incineration, the owner or operator shall include the following additional data in the control device initial performance test requried by §60.8(a) or subsequent performance tests at which destruction efficiency is determined: the combustion temperature (or the gas temperature upstream and downstream of the catalyst bed), the total mass of VOC per volume of applied coating solids before and after the incinerator, capture efficiency, the destruction efficiency of the incinerator used to attain compliance with the applicable emission limit specified in §60.392 and a description of the method used to establish the fraction of VOC captured and sent to the control device.

(b) Following the initial performance test, the owner or operator of an affected facility shall identify, record, and submit a written report to the Administrator every calendar quarter of each instance in which the volume-weighted average of the total mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under §60.392. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Administrator semiannually. Where compliance is achieved through the use of a capture system and control device, the volume-weighted average after the control device should be reported.

(c) Where compliance with §60.392 is achieved through the use of incineration, the owner or operator shall continuously record the incinerator combustion temperature during coating operations for thermal incineration or the gas temperature upstream and downstream of the incinerator catalyst bed during coating operations for catalytic incineration. The owner or operator shall submit a written report at the frequency specified in §60.7(c) and as defined below.

(1) For thermal incinerators, every three-hour period shall be reported during which the average temperature measured is more than 28 °C less than the average temperature during the most recent

control device performance test at which the destruction efficiency was determined as specified under §60.393.

(2) For catalytic incinerators, every three-hour period shall be reported during which the average temperature immediately before the catalyst bed, when the coating system is operational, is more than 28 °C less than the average temperature immediately before the catalyst bed during the most recent control device performance test at which destruction efficiency was determined as specified under §60.393. In addition, every three-hour period shall be reported each quarter during which the average temperature difference across the catalyst bed when the coating system is operational is less than 80 percent of the average temperature difference of the device during the most recent control device performance test at which destruction efficiency was determined as specified under §60.393.

(3) For thermal and catalytic incinerators, if no such periods occur, the owner or operator shall submit a negative report.

(d) The owner or operator shall notify the Administrator 30 days in advance of any test by Method 25.

[45 FR 85415, Dec. 24, 1980, as amended at 55 FR 51383, Dec. 13, 1990; 65 FR 61760, Oct. 17, 2000]

§60.396 Reference methods and procedures.

(a) The reference methods in appendix A to this part, except as provided in §60.8 shall be used to conduct performance tests.

(1) Method 24 or an equivalent or alternative method approved by the Administrator shall be used for the determination of the data used in the calculation of the VOC content of the coatings used for each affected facility. Manufacturers' formulation data is approved by the Administrator as an alternative method to Method 24. In the event of dispute, Method 24 shall be the referee method.

(2) Method 25 or an equivalent or alternative method approved by the Administrator shall be used for the determination of the VOC concentration in the effluent gas entering and leaving the emission control device for each stack equipped with an emission control device and in the effluent gas leaving each stack not equipped with a control device.

(3) The following methods shall be used to determine the volumetric flow rate in the effluent gas in a stack:

(i) Method 1 for sample and velocity traverses,

(ii) Method 2 for velocity and volumetric flow rate,

(iii) Method 3 for gas analysis, and

(iv) Method 4 for stack gas moisture.

(b) For Method 24, the coating sample must be a 1-liter sample taken in a 1-liter container.

(c) For Method 25, the sampling time for each of three runs must be at least one hour. The minimum sample volume must be 0.003 dscm except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Administrator. The Administrator will approve the sampling of representative stacks on a case-by-case basis if the owner or operator can demonstrate to the satisfaction of the Administrator that the testing of representative stacks would yield results comparable to those that would be obtained by testing all stacks.

[45 FR 85415, Dec. 24, 1980, as amended at 65 FR 61760, Oct. 17, 2000]

§60.397 Modifications.

The following physical or operational changes are not, by themselves, considered modifications of existing facilities:

(a) Changes as a result of model year changeovers or switches to larger cars.

(b) Changes in the application of the coatings to increase coating film thickness.

§60.398 Innovative technology waivers.

(a) *General Motors Corporation, Wentzville, Missouri, automobile assembly plant.* (1) Pursuant to section 111(j) of the Clean Air Act, 42 U.S.C. 7411(j), each topcoat operation at General Motors Corporation automobile assembly plant located in Wentzville, Missouri, shall comply with the following conditions:

(i) The General Motors Corporation shall obtain the necessary permits as required by section 173 of the Clean Air Act, as amended August 1977, to operate the Wentzville assembly plant.

(ii) Commencing on February 4, 1983, and continuing to December 31, 1986, or until the base coat/clear coat topcoat system that can achieve the standard specified in 40 CFR 60.392(c) (Dec. 24, 1980) is demonstrated to the Administrator's satisfaction the General Motors Corporation shall limit the discharge of VOC emissions to the atmosphere from each topcoat operation at the Wentzville, Missouri, assembly plant, to either:

(A) 1.9 kilograms of VOC per liter of applied coating solids from base coat/clear coat topcoats, and 1.47 kilograms of VOC per liter of applied coating solids from all other topcoat coatings; or

(B) 1.47 kilograms of VOC per liter of applied coating solids from all topcoat coatings.

(iii) Commencing on the day after the expiration of the period described in paragraph (a)(1)(ii) of this section, and continuing thereafter, emissions of VOC from each topcoat operations shall not exceed 1.47 kilograms of VOC per liter of applied coating solids as specified in 40 CFR 60.392(c) (Dec. 24, 1980).

(iv) Each topcoat operation shall comply with the provisions of §§60.393, 60.394, 60.395, 60.396, and 60.397. Separate calculations shall be made for base coat/clear coat coatings and all other topcoat coatings when necessary to demonstrate compliance with the emission limits in paragraph (a)(1)(ii)(A) of this section.

(v) A technology development report shall be sent to EPA Region VII, 324 East 11th Street, Kansas City, MO 64106, postmarked before 60 days after the promulgation of this waiver and annually thereafter while this waiver is in effect. The technology development report shall summarize the base coat/clear coat development work including the results of exposure and endurance tests of the various coatings being evaluated. The report shall include an updated schedule of attainment of 40 CFR 60.392(c) (Dec. 24, 1980) based on the most current information.

(2) This waiver shall be a federally promulgated standard of performance. As such, it shall be unlawful for General Motors Corporation to operate a topcoat operation in violation of the requirements established in this waiver. Violation of the terms and conditions of this waiver shall subject the General Motors Corporation to enforcement under section 113 (b) and (c), 42 U.S.C. 7412 (b) and (c), and section 120, 42 U.S.C. 7420, of the Act as well as possible citizen enforcement under section 304 of the Act, 42 U.S.C. 7604.

(b) *General Motors Corporation, Detroit, Michigan, Automobile Assembly plant.* (1) Pursuant to section 111(j) of the Clean Air Act, 42 U.S.C. 7411(j), each topcoat operation at General Motors Corporation's automobile assembly plant located in Detroit, MI, shall comply with the following conditions:

(i) The General Motors Corporation shall obtain the necessary permits as required by section 173 of the Clean Air Act, as amended August 1977, to operate the Detroit assembly plant.

(ii) Commencing on February 4, 1983, and continuing to December 31, 1986, or until the base coat/clear coat topcoat system that can achieve the standard specified in 40 CFR 60.392(c) (Dec. 24, 1980), is demonstrated to the Administrator's satisfaction, the General Motors Corporation shall limit the discharge of VOC emissions to the atmosphere from each topcoat operation at the Detroit, MI, assembly plant, to either:

(A) 1.9 kilograms of VOC per liter of applied coating solids from base coat/clear coat topcoats, and 1.47 kilograms of VOC per liter of applied coating solids from all other topcoat coatings; or

(B) 1.47 kilograms of VOC per liter of applied coating solids from all topcoat coatings.

(iii) Commencing on the day after the expiration of the period described in paragraph (b)(ii) of this section, and continuing thereafter, emissions of VOC from each topcoat operation shall not exceed 1.47 kilograms of VOC per liter of applied coating solids as specified in 40 CFR 60.392(c) (December 24, 1980).

(iv) Each topcoat operation shall comply with the provisions of §§60.393, 60.394, 60.395, 60.396, and 60.397. Separate calculations shall be made for base coat/clear coat coatings and all other topcoat coatings when necessary to demonstrate compliance with the emission limits in paragraph (b)(1)(ii)(A) of this section.

(v) A technology development report shall be sent to EPA Region V, 230 South Dearborn Street, Chicago, IL 60604, postmarked before 60 days after the promulgation of this waiver and annually thereafter while this waiver is in effect. The technology development report shall summarize the base coat/clear coat development work including the results of exposure and endurance tests of the various coatings being

evaluated. The report shall include an updated schedule of attainment of 40 CFR 60.392(c) (Dec. 24, 1980) based on the most current information.

(2) This waiver shall be a federally promulgated standard of performance. As such, it shall be unlawful for General Motors Corporation to operate a topcoat operation in violation of the requirements established in this waiver. Violation of the terms and conditions of this waiver shall subject the General Motors Corporation to enforcement under section 113 (b) and (c), 42 U.S.C. 7412 (b) and (c), and section 120, 42 U.S.C. 7420, of the Act as well as possible citizen enforcement under section 304 of the Act, 42 U.S.C. 7604.

(c) *General Motors Corporation, Orion Township, MI, automobile assembly plant.* (1) Pursuant to section 111(j) of the Clean Air Act, 42 U.S.C. 7411(j), each topcoat operation at General Motors Corporation automobile assembly plant located in Orion Township, MI, shall comply with the following conditions:

(i) The General Motors Corporation shall obtain the necessary permits as required by section 173 of the Clean Air Act, as amended August 1977, to operate the Orion Township assembly plant.

(ii) Commencing on February 4, 1983, and continuing to December 31, 1986, or until the base coat/clear coat topcoat system that can achieve the standard specified in 40 CFR 60.392(c) (Dec. 24, 1980) is demonstrated to the Administrator's satisfaction, the General Motors Corporation shall limit the discharge of VOC emissions to the atmosphere from each topcoat operation at the Orion Township, MI, assembly plant, to either:

(A) 1.9 kilograms of VOC per liter of applied coating solids from base coat/clear coat topcoats, and 1.47 kilograms of VOC per liter of applied coating solids from all other topcoat coatings; or

(B) 1.47 kilograms of VOC per liter of applied coating solids from all topcoat coatings.

(iii) Commencing on the day after the expiration of the period described in paragraph (c)(l)(ii) of this section and continuing thereafter, emissions of VOC from each topcoat operation shall not exceed 1.47 kilograms of VOC per liter of applied coating solids as specified in 40 CFR 60.392(c) (Dec. 24, 1980).

(iv) Each topcoat operation shall comply with the provisions of §§60.393, 60.394, 60.395, 60.396, and 60.397. Separate calculations shall be made for base coat/clear coat coatings and all other topcoat coatings when necessary to demonstrate compliance with the emission limits in paragraph (c)(l) (ii)(A) of this section.

(v) A technology development report shall be sent to EPA Region V, 230 South Dearborn Street, Chicago, IL 60604, postmarked before 60 days after the promulgation of this waiver and annually thereafter while this waiver is in effect. The technology development report shall summarize the base coat/clear coat development work including the results of exposure and endurance tests of the various coatings being evaluated. The report shall include an updated schedule of attainment of 40 CFR 60.392(c) (December 24, 1980) based on the most current information.

(2) This waiver shall be a federally promulgated standard of performance. As such, it shall be unlawful for General Motors Corporation to operate a topcoat operation in violation of the requirements established in this waiver. Violation of the terms and conditions of this waiver shall subject the General Motors Corporation to enforcement under section 113 (b) and (c), 42 U.S.C. 7412 (b) and (c), and section 120, 42 U.S.C. 7420, of the Act as well as possible citizen enforcement under section 304 of the Act, 42 U.S.C. 7604.

(d) *Honda of America Manufacturing, Incorporated (Honda), Marysville, Ohio, automobile assembly plant.* (1) Pursuant to section 111(j) of the Clean Air Act, 42 U.S.C. 7411(j), each topcoat operation at Honda's automobile assembly plant located in Marysville, OH, shall comply with the following conditions:

(i) Honda shall obtain the necessary permits as required by section 173 of the Clean Air Act, as amended August 1977, to operate the Marysville assembly plant.

(ii) Commencing on February 4, 1983, and continuing for 4 years or to December 31, 1986, whichever is sooner, or until the base coat/clear coat topcoat system that can achieve the standard specified in 40 CFR 60.392(c) (Dec. 24, 1980) is demonstrated to the Administrator's satisfaction, Honda shall limit the discharge of VOC emissions to the atmosphere from each topcoat operation at Marysville, OH, assembly plant, to either:

(A) 3.1 kilograms of VOC per liter of applied coating solids from base coat/clear coat topcoats, and 1.47 kilograms of VOC per liter of applied coating solids from all other topcoat coatings; or

(B) 1.47 kilograms of VOC per liter of applied coating solids from all topcoat coatings.

(iii) Commencing on the day after the expiration of the period described in paragraph (d)(1)(ii) of this section and continuing thereafter, emissions of VOC from each topcoat operation shall not exceed 1.47 kilograms of VOC per liter of applied coating solids as specified in 40 CFR 60.392(c) (December 24, 1980).

(iv) Each topcoat operation shall comply with the provisions of §§60.393, 60.394, 60.395, 60.396, and 60.397. Separate calculations shall be made for base coat/clear coat coatings and all other topcoat coatings when necessary to demonstrate compliance with the emission limits in paragraph (d)(1)(ii)(A) of this section.

(v) A technology development report shall be sent to EPA Region V, 230 South Dearborn Street, Chicago, IL 60604, postmarked before 60 days after the promulgation of this waiver and annually thereafter while this waiver is in effect. The technology development report shall summarize the base coat/clear coat development work including the results of exposure and endurance tests of the various coatings being evaluated. The report shall include an updated schedule of attainment of 40 CFR 60.392(c) (Dec. 24, 1980) based on the most current information.

(2) This waiver shall be a federally promulgated standard of performance. As such, it shall be unlawful for Honda to operate a topcoat operation in violation of the requirements established in this waiver. Violation of the terms and conditions of this waiver shall subject Honda to enforcement under section

113(b) and (c), 42 U.S.C. 7412(b) and (c), and section 120, 42 U.S.C. 7420, of the Act as well as possible citizen enforcement under section 304 of the Act, 42 U.S.C. 7604.

(e) *Nissan Motor Manufacturing Corporation, U.S.A. (Nissan), Smyrna, TN, light-duty truck assembly plant.* (1) Pursuant to section 111(j) of the Clean Air Act, 42 U.S.C. 7411(j), each topcoat operation at Nissan's light-duty truck assembly plant located in Smyrna, Tennessee, shall comply with the following conditions:

(i) Nissan shall obtain the necessary permits as required by section 173 of the Clean Air Act, as amended August 1977, to operate the Smyrna assembly plant.

(ii) Commencing on February 4, 1983, and continuing for 4 years or to December 31, 1986, whichever is sooner, or until the base coat/clear coat topcoat system that can achieve the standard specified in 40 CFR 60.392(c) (Dec. 24, 1980), is demonstrated to the Administrator's satisfaction, Nissan shall limit the discharge of VOC emissions to the atmosphere from each topcoat operation at the Smyrna, TN, assembly plant, to either:

(A) 2.3 kilograms of VOC per liter of applied coating solids from base coat/clear coat topcoats, and 1.47 kilograms of VOC per liter of applied coating solids from all other topcoat coatings; or

(B) 1.47 kilograms of VOC per liter of applied coating solids from all topcoat coatings.

(iii) Commencing on the day after the expiration of the period described in paragraph (e)(1)(ii) of this section and continuing thereafter, emissions of VOC from each topcoat operation shall not exceed 1.47 kilograms of VOC per liter of applied coating solids as specified in 40 CFR 60.392(c) (Dec. 24, 1980).

Each topcoat operation shall comply with the provisions of §§60.393, 60.394, 60.395, 60.396, and 60.397. Separate calculations shall be made for base coat/clear coat coatings and all other topcoat coatings when necessary to demonstrate compliance with the emission limits in paragraph (e)(1)(ii)(A) of this section.

(f) *Chrysler Corporation, Sterling Heights, MI, automobile assembly plant.* (1) Pursuant to section 111(j) of the Clean Air Act, 42 U.S.C. 7411(j), each topcoat operation at Chrysler Corporation's automobile assembly plant located in Sterling Heights, MI, shall comply with the following conditions:

(i) The Chrysler Corporation shall obtain the necessary permits as required under Parts C and D of the Clean Air Act, as amended August 1977, to operate the Sterling Heights assembly plant.

(ii) Commencing on September 9, 1985, and continuing to December 31, 1986, or until the basecoat/clearcoat (BC/CC) topcoat system that can achieve the standard specified under §60.392(c) of this subpart is demonstrated to the Administrator's satisfaction, whichever is sooner, the Chrysler Corporation shall limit the discharge of VOC emissions to the atmosphere from each topcoat operation at the Sterling Heights, MI assembly plant, to either:

(A) 1.7 kilograms of VOC per liter of applied coating solids from BC/CC topcoats, and 1.47 kilograms of VOC per liter of applied coating solids from all other topcoat coatings; or

(B) 1.47 kilograms of VOC per liter of applied coating solids from all topcoat coatings.

(iii) Commencing on the day after the expiration of the period described in paragraph (f)(1)(ii) and continuing thereafter, emissions of VOC's from each topcoat operation shall not exceed 1.47 kilograms of VOC per liter of applied coating solids as specified under §60.392(c) of this subpart.

(iv) Each topcoat operation shall comply with the provisions of §§60.393, 60.394, 60.395, 60.396, and 60.397. Separate calculations shall be made for BC/CC coatings and all other topcoat coatings when necessary to demonstrate compliance with the emission limits specified under paragraph (f)(1)(ii)(A) of this section.

(v) A technology development report shall be sent to EPA Region V, 230 South Dearborn Street, Chicago, IL 60604, postmarked before 60 days after the promulgation of this waiver and annually thereafter while this waiver is in effect. A copy of this report shall be sent to Director, Emission Standards and Engineering Division, U.S. Environmental Protection Agency, MD-13, Research Triangle Park, NC 27711. The technology development report shall summarize the BC/CC development work including the results of exposure and endurance tests of the various coatings being evaluated. The report shall include an updated schedule of attainment of §60.392(c) of this subpart, based on the most current information.

(2) This waiver shall be a federally promulgated standard of performance. As such, it shall be unlawful for the Chrysler Corporation to operate a topcoat operation in violation of the requirements established in this waiver. Violation of the terms and conditions of this waiver shall subject the Chrysler Corporation to enforcement under sections 113 (b) and (c) of the Act (42 U.S.C. 7412 (b) and (c)) and under section 120 of the Act (42 U.S.C. 7420), as well as possible citizen enforcement under section 304 of the Act (42 U.S.C. 7604).

(3) This waiver shall not be construed to constrain the State of Michigan from imposing upon the Chrysler Corporation any emission reduction requirement at Chrysler's Sterling Heights automobile assembly plant necessary for the maintenance of reasonable further progress or the attainment of the national ambient air quality standard for ozone or the maintenance of the national ambient air quality standard for ozone. Furthermore, this waiver shall not be construed as granting any exemptions from the applicability, enforcement, or other provisions of any other standards that apply or may apply to topcoat operations or any other operations at this automobile assembly plant.

(g) *Ford Motor Company, Hapeville, GA, automotive assemply plant.* (1) Pursuant to section 111(j) of the Clean Air Act, 42 U.S.C. 7411(j), each topcoat operation at Ford Motor Company's automobile assembly plant located in Hapeville, GA, shall comply with the following conditions:

(i) The Ford Motor Company shall obtain the necessary permits as required under parts C and D of the Clean Air Act, as amended August 1977, to operate the Hapeville assembly plant.

(ii) Commencing on September 9, 1985, and continuing to December 31, 1986, or until the basecoat/clearcoat (BC/CC) topcoat system that can achieve the standard specified under §60.392(c) of this subpart is demonstrated to the Administrator's satisfaction, whichever is sooner, the Ford Motor Company shall limit the discharge of VOC emissions to the atmosphere from each topcoat operation at the Hapeville, GA, assembly plant, to either:

(A) 2.6 kilograms of VOC per liter of applied coating solids from BC/CC topcoats, and 1.47 kilograms of VOC per liter of applied coating solids from all other topcoat coatings; or

(B) 1.47 kilograms of VOC per liter of applied coating solids from all topcoat coatings.

(iii) Commencing on the day after the expiration of the period described in paragraph (g)(1)(ii) and continuing thereafter, emissions of VOC's from each topcoat operation shall not exceed 1.47 kilograms of VOC per liter of applied coating solids as specified under §60.392(c) of this subpart.

(iv) Each topcoat operation shall comply with the provisions of §§60.393, 60.394, 60.395, 60.396, and 60.397. Separate calculations shall be made for BC/CC coatings and all other topcoat coatings when necessary to demonstrate compliance with the emission limits specified under paragraph (g)(1)(ii)(A) of this section.

(v) A technology development report shall be sent to EPA Region IV, 345 Courtland Street, NE., Atlanta, GA 30365, postmarked before 60 days after the promulgation of this waiver and annually thereafter while this waiver is in effect. A copy of this report shall be sent to Director, Emission Standards and Engineering Division, U.S. Environmental Protection Agency, MD-13, Research Triangle Park, NC 27711. The technology development report shall summarize the BC/CC development work including the results of exposure and endurance tests of the various coatings being evaluated. The report shall include an updated schedule of attainment of §60.392(c) of this subpart, based on the most current information.

(2) This waiver shall be a federally promulgated standard of performance. As such, it shall be unlawful for the Ford Motor Company to operate a topcoat operation in violation of the requirements established in this waiver. Violation of the terms and conditions of this waiver shall subject the Ford Motor Company to enforcement under section 113 (b) and (c) and the Act (42 U.S.C. 7412 (b) and (c)) and under section 120 of the Act (42 U.S.C. 7420), as well as possible citizen enforcement under section 304 of the Act (42 U.S.C. 7604).

(3) This waiver shall not be construed to constrain the State of Georgia from imposing upon the Ford Motor Corporation any emission reduction requirement at Ford's Hapeville automobile assembly plant necessary for the maintenance of reasonable further progress or the attainment of the national ambient air quality standard for ozone or the maintenance of the national ambient air quality standard for ozone. Furthermore, this waiver shall not be construed as granting any exemptions from the applicability, enforcement, or other provisions of any other standards that apply or may apply to topcoat operations or any other operations at this automobile assembly plant.

(h) *Ford Motor Company, St. Paul, MN, light-duty truck assembly plant.* (1) Pursuant to section 111(j) of the Clean Air Act, 42 U.S.C. 7411(j), each topcoat operation at Ford Motor Company's automobile assembly plant located in St. Paul, MN, shall comply with the following conditions:

(i) The Ford Motor Company shall obtain the necessary permits as required under parts C and D of the Clean Air Act, as amended August 1977, to operate the St. Paul assembly plant.

(ii) Commencing on September 9, 1985, and continuing to December 31, 1986, or until the basecoat/clearcoat (BC/CC) topcoat system that can achieve the standard specified under §60.392(c) of this subpart, is demonstrated to the Administrator's satisfaction, whichever is sooner, the Ford Motor Company shall limit the discharge of VOC emissions to the atmosphere from each topcoat operation at the St. Paul, MN, assembly plant, to either:

(A) 2.0 kilograms of VOC per liter of applied coating solids from BC/CC topcoats, and 1.47 kilograms of VOC per liter of applied coating solids from all other topcoat coatings; or

(B) 1.47 kilograms of VOC per liter of applied coating solids from all topcoat coatings.

(iii) Commencing on the day after the expiration of the period described in paragraph (h)(1)(ii) and continuing thereafter, emissions of VOC's from each topcoat operation shall not exceed 1.47 kilograms of VOC per liter of applied coating solids as specified under §60.392(c) of this subpart.

(iv) Each topcoat operation shall comply with the provisions of §§60.393, 60.394, 60.395, 60.396, and 60.397. Separate calculations shall be made for BC/CC coatings and all other topcoat coatings when necessary to demonstrate compliance with the emission limits specified under paragraph (h)(1)(ii)(A) of this section.

(v) A technology development report shall be sent to EPA Region V, 230 South Dearborn Street, Chicago, IL 60604, postmarked before 60 days after the promulgation of this waiver and annually thereafter while this waiver is in effect. A copy of this report shall be sent to Director, Emission Standards and Engineering Division, U.S. Environmental Protection Agency, MD-13, Research Triangle Park, NC 27711. The technology development report shall summarize the BC/CC development work including the results of exposure and endurance tests of the various coatings being evaluated. The report shall include an updated schedule of attainment of §60.392(c) of this subpart, based on the most current information.

(2) This waiver shall be a federally promulgated standard of performance. As such, it shall be unlawful for the Ford Motor Company to operate a topcoat operation in violation of the requirements established in this waiver. Violation of the terms and conditions of this wavier shall subject the Ford Motor Company to enforcement under section 113 (b) and (c) of the Act (42 U.S.C. 7412 (b) and (c)) and under section 120 of the Act (42 U.S.C. 7420), as well as possible citizen enforcement under section 304 of the Act (42 U.S.C. 7604).

(3) This waiver shall not be construed to constrain the State of Minnesota from imposing upon the Ford Motor Corporation any emission reduction requirements at Ford's St. Paul light-duty truck assembly plant necessary for the maintenance of reasonable further progress or the attainment of the national

ambient air quality standard for ozone or the maintenance of the national ambient air quality standard for ozone. Furthermore, this waiver shall not be construed as granting any exemptions from the applicability, enforcement, or other provisions of any other standards that apply or may apply to topcoat operations or any other operations at this light-duty truck assembly plant.

(i) *Ford Motor Company, Hazelwood, MO, passenger van assembly plant.* (1) Pursuant to section 111(j) of the Clean Air Act, 42 U.S.C. 7411(j), each topcoat operation at Ford Motor Company's passenger van assembly plant located in Hazelwood, MO, shall comply with the following conditions:

(i) The Ford Motor Company shall obtain the necessary permits as required under parts C and D of the Clean Air Act, as amended August 1977, to operate the Hazelwood assembly plant.

(ii) Commencing on September 9, 1985, and continuing to December 31, 1986, or until the basecoat/clearcoat (BC/CC) topcoat system that can achieve the standard specified under §60.392(c) of this subpart is demonstrated to the Administrator's satisfaction, whichever is sooner, the Ford Motor Company shall limit the discharge of VOC emissions to the atmosphere from each topcoat operation at the Hazelwood, MO, assembly plant, to either:

(A) 2.5 kilograms of VOC per liter of applied coating solids from BC/CC topcoats, and 1.47 kilograms of VOC per liter of applied coating solids from all other topcoat coatings; or

(B) 1.47 kilograms of VOC per liter of applied coating solids from all topcoat coatings.

(iii) Commencing on the day after the expiration of the period described in paragraph (i)(1)(ii) and continuing thereafter, emissions of VOC's from each topcoat operation shall not exceed 1.47 kilograms of VOC per liter of applied coating solids as specified under §60.392(c) of this subpart.

(iv) Each topcoat operation shall comply with the provisions of §§60.393, 60.394, 60.395, 60.396, and 60.397. Separate calculations shall be made for BC/CC coatings and all other topcoat coatings when necessary to demonstrate compliance with the emission limits specified under paragraph (i)(1)(ii)(A) of this section.

(v) A technology development report shall be sent to EPA Region VII, 726 Minnesota Avenue, Kansas City, KS 61101, postmarked before 60 days after the promulgation of this waiver and annually thereafter while this waiver is in effect. A copy of this report shall be sent to Director, Emission Standards and Engineering Division, U.S. Environmental Protection Agency, MD-13, Research Triangle Park, NC 27711. The technology development report shall summarize the BC/CC development work including the results of exposure and endurance tests of the various coatings being evaluated. The report shall include an updated schedule of attainment of §60.392(c) of this subpart, based on the most current information.

(2) This waiver shall be a federally promulgated standard of performance. As such, it shall be unlawful for the Ford Motor Company to operate a topcoat operation in violation of the requirements established in this waiver. Violation of the terms and conditions of this waiver shall subject the Ford Motor Company to enforcement under section 113 (b) and (c) of the Act (42 U.S.C. 7412 (b) and (c)) and

under section 120 of the Act (42 U.S.C. 7420), as well as possible citizen enforcement under section 304 of the Act (42 U.S.C. 7604).

(3) This waiver shall not be construed to constrain the State of Missouri from imposing upon the Ford Motor Corporation any emission reduction at Ford's Hazelwood passenger van assembly plant necessary for the maintenance of reasonable further progress or the attainment of the national ambient air quality standards for ozone or the maintenance of the national ambient air quality standard for ozone. Furthermore, this waiver shall not be construed as granting any exemptions from the applicability, enforcement, or other provisions of any other standards that apply or may apply to topcoat operations or any other operations at this passenger van assembly plant.

[48 FR 5454, Feb. 4, 1983, as amended at 50 FR 36834, Sept. 9, 1985]

Title 40: Protection of Environment
PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart IIII—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

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Source: 69 FR 22623, Apr. 26, 2004, unless otherwise noted.

What This Subpart Covers

§63.3080 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for facilities which surface coat new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks. This subpart also establishes NESHAP for facilities which surface coat new other motor vehicle bodies or body parts for new other motor vehicles which you choose to include in your affected source pursuant to §63.3082(c). This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

[71 FR 76926, Dec. 22, 2006]

§63.3081 Am I subject to this subpart?

(a) Except as provided in paragraph (c) of this section, the source category to which this subpart applies is automobile and light-duty truck surface coating.

(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3082, that, except as noted in paragraph (b)(1) of this section, is located at a facility which applies topcoat to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks, and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAP). You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3082, in which you choose to include, pursuant to §63.3082(c), any coating operations which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles; parts intended for use in new automobiles, new light-duty trucks, or new other motor vehicles; or aftermarket repair or replacement parts for automobiles, light-duty trucks, or other motor vehicles; and the affected source is located at a facility that is a major source, is located at a major source, or is part of a major source of emissions of HAP. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year.

(1) You are not subject to this subpart if you meet all of the criteria of paragraphs (b)(1)(i) through (iii) of this section:

(i) Your coating operation is located at a plastic or composites molding facility;

(ii) All of the body parts topcoated at your facility for use in new automobiles or new light-duty trucks were fabricated (molded, stamped, formed, etc.) at your facility or at another plastic or composites molding facility which you own or operate, and none of the new vehicles in which these body parts are used are assembled at your facility; and

(iii) You do not topcoat all of the body parts for any single new automobile or new light-duty truck at your facility.

(2) [Reserved]

(c) This subpart does not apply to surface coating, surface preparation, or cleaning activities that meet the criteria of paragraph (c)(1) or (2) of this section.

(1) Surface coating subject to any other NESHAP in this part as of June 25, 2004 except as provided in §63.3082(c).

(2) Surface coating that occurs during research or laboratory activities or that is part of janitorial, building, and facility maintenance operations, including maintenance spray booths used for painting production equipment, furniture, signage, etc., for use within the plant.

[57 FR 61992, Dec. 29, 1992, as amended at 72 FR 20233, Apr. 24, 2007]

§63.3082 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, and existing affected source.

(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks:

(1) All coating operations as defined in §63.3176.

(2) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed.

(3) All manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials.

(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

(c) In addition, you may choose to include in your affected source, and thereby make subject to the requirements of this subpart, any coating operations, as defined in §63.3176, which would otherwise be subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products (subpart MMMM of this part) or the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products (subpart PPPP of this part) which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles, parts intended for use in new automobiles, new light-duty trucks, or new other motor vehicles, or aftermarket repair or replacement parts for automobiles, light-duty trucks, or other motor vehicles.

(d) For all coating operations which you choose to add to your affected source pursuant to paragraph (c) of this section:

(1) All associated storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed; manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials; and storage containers and manual and automated equipment and containers used for conveying waste materials are also included in your affected source and are subject to the requirements of this subpart.

(2) All cleaning and purging of equipment associated with the added surface coating operations is subject to the requirements of this subpart.

(3) You must identify and describe all additions to the affected source made pursuant to paragraph (c) of this section in the initial notification required in §63.3110(b).

(e) An affected source is a new affected source if:

(1) You commenced its construction after December 24, 2002; and

(2) The construction is of a completely new automobile and light-duty truck assembly plant, automobile and light-duty truck paint shop, automobile and light-duty truck topcoat operation, other motor vehicle assembly plant, other motor vehicle paint shop, or other motor vehicle topcoat operation where previously no automobile and light-duty truck assembly plant, automobile and light-duty truck assembly paint shop, or automobile and light-duty truck assembly topcoat operation had existed; and

(i) No other motor vehicle assembly plant, other motor vehicle paint shop, or other motor vehicle topcoat operation had existed previously; or

(ii) No previously existing other motor vehicle assembly plant, other motor vehicle paint shop, or other motor vehicle topcoat operation is subject to this subpart; or

(iii) If the facility was previously not a major source for HAP, no previously existing other motor vehicle assembly plant, other motor vehicle paint shop, or other motor vehicle topcoat operation is made part of the affected source under this subpart.

(f) An affected source is reconstructed if its paint shop undergoes replacement of components to such

an extent that:

(1) The fixed capital cost of the new components exceeded 50 percent of the fixed capital cost that would be required to construct a new paint shop; and

(2) It was technologically and economically feasible for the reconstructed source to meet the relevant standards established by the Administrator pursuant to section 112 of the Clean Air Act (CAA).

(g) An affected source is existing if it is not new or reconstructed.

[69 FR 22623, Apr. 26, 2004, as amended at 71 FR 76926, Dec. 22, 2006]

§63.3083 When do I have to comply with this subpart?

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstrations described in §§63.3150, 63.3160, and 63.3170.

(a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:

(1) If the initial startup of your new or reconstructed affected source is before June 25, 2004, the compliance date is June 25, 2004.

(2) If the initial startup of your new or reconstructed affected source occurs after June 25, 2004, the compliance date is the date of initial startup of your affected source.

(b) For an existing affected source, the compliance date is April 26, 2007.

(c) For an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP emissions, the compliance date is specified in paragraphs (c)(1) and (2) of this section.

(1) For any portion of the source that becomes a new or reconstructed affected source subject to this subpart, the compliance date is the date of initial startup of the affected source or June 25, 2004, whichever is later.

(2) For any portion of the source that becomes an existing affected source subject to this subpart, the compliance date is the date 1 year after the area source becomes a major source or April 26, 2007, whichever is later.

(d) You must meet the notification requirements in §63.3110 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.

Emission Limitations

§63.3090 What emission limits must I meet for a new or reconstructed affected source?

(a) Except as provided in paragraph (b) of this section, you must limit combined organic HAP emissions to the atmosphere from electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) to no more than 0.036 kilogram (kg)/liter (0.30 pound (lb)/gallon (gal)) of coating solids deposited during each month, determined according to the requirements in §63.3161.

(b) If you meet the operating limits of §63.3092(a) or (b), you must either meet the emission limits of paragraph (a) of this section or limit combined organic HAP emissions to the atmosphere from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) to no more than 0.060 kg/liter (0.50 lb/gal) of applied coating solids used during each month, determined according to the requirements in §63.3171. If you do not have an electrodeposition primer system, you must limit combined organic HAP emissions to the atmosphere from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) to no more than 0.060 kg/liter (0.50 lb/gal) of applied coating solids used during each month, determined according to the requirements in §63.3171.

(c) You must limit average organic HAP emissions from all adhesive and sealer materials other than materials used as components of glass bonding systems to no more than 0.010 kg/kg (lb/lb) of adhesive and sealer material used during each month.

(d) You must limit average organic HAP emissions from all deadener materials to no more than 0.010 kg/kg (lb/lb) of deadener material used during each month.

(e) For coatings and thinners used in coating operations added to the affected source pursuant to §63.3082(c):

(1) Adhesive and sealer materials that are not components of glass bonding systems are subject to and must be included in your demonstration of compliance for paragraph (c) of this section.

(2) Deadener materials are subject to and must be included in your demonstration of compliance for paragraph (d) of this section.

(3) All other coatings and thinners are subject to and must be included in your demonstration of compliance for paragraphs (a) or (b) of this section.

(f) If your facility has multiple paint lines (*e.g.,* two or more totally distinct paint lines each serving a distinct assembly line, or a facility with two or more paint lines sharing the same paint kitchen or mix room), then for the operations addressed in paragraphs (a) and (b) of this section:

(1) You may choose to use a single grouping under paragraph (a) of this section for all of your electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations.

(2) You may choose to use a single grouping under paragraph (b) of this section for all of your primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations as long as each of your electrodeposition primer systems meets the operating limits of §63.3092(a) or (b).

(3) You may choose to use one or more groupings under paragraph (a) of this section for the electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from one or more of your paint lines; and one or more groupings under paragraph (b) of this section for the primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from the remainder of your paint lines, as long as each electrodeposition primer system associated with each paint line you include in a grouping under paragraph (b) of this section meets the operating limits of §63.3092(a) or (b). For example, if your facility has three paint lines, you may choose to use one grouping under paragraph (a) of this section for two of the paint lines; and a separate grouping under paragraph (b) of this section for the third paint line, as long as the electrodeposition primer system associated with the paint line you include in the grouping under paragraph (b) of this section meets the operating limits of §63.3092(a) or (b). Alternatively, you may choose to use one grouping for two of the paint lines and a separate grouping of the same type for the third paint line. Again, each electrodeposition primer system associated with each paint line you include in a grouping under paragraph (b) of this section must meet the operating limits of §63.3092(a) or (b).

(4) You may choose to consider the electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from each of your paint lines as a separate grouping under either paragraph (a) or paragraph (b) of this section. The electrodeposition primer system associated with each paint line you choose to consider in a grouping under paragraph (b) of this section must meet the operating limits of §63.3092(a) or (b). For example, if your facility has two paint lines, you may choose to use the grouping under paragraph (a) of this section for one paint line and the grouping under paragraph (b) of this section for the other paint line.

§63.3091 What emission limits must I meet for an existing affected source?

(a) Except as provided in paragraph (b) of this section, you must limit combined organic HAP emissions to the atmosphere from electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) to no more than 0.072 kg/liter (0.60 lb/gal) of coating solids deposited during each month, determined according to the

requirements in §63.3161.

(b) If you meet the operating limits of §63.3092(a) or (b), you must either meet the emission limits of paragraph (a) of this section or limit combined organic HAP emissions to the atmosphere from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) to no more than 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month, determined according to the requirements in §63.3171. If you do not have an electrodeposition primer system, you must limit combined organic HAP emissions to the atmosphere from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) to no more than 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month, determined according to the requirements in §63.3171.

(c) You must limit average organic HAP emissions from all adhesive and sealer materials other than materials used as components of glass bonding systems to no more than 0.010 kg/kg (lb/lb) of adhesive and sealer material used during each month.

(d) You must limit average organic HAP emissions from all deadener materials to no more than 0.010 kg/kg (lb/lb) of deadener material used during each month.

(e) For coatings and thinners used in coating operations added to the affected source pursuant to §63.3082(c):

(1) Adhesive and sealer materials that are not components of glass bonding systems are subject to and must be included in your demonstration of compliance for paragraph (c) of this section.

(2) Deadener materials are subject to and must be included in your demonstration of compliance for paragraph (d) of this section.

(3) All other coatings and thinners are subject to and must be included in your demonstration of compliance for paragraphs (a) or (b) of this section.

(f) If your facility has multiple paint lines (*e.g.,* two or more totally distinct paint lines each serving a distinct assembly line, or a facility with two or more paint lines sharing the same paint kitchen or mix room), then for the operations addressed in paragraphs (a) and (b) of this section:

(1) You may choose to use a single grouping under paragraph (a) of this section for all of your electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations.

(2) You may choose to use a single grouping under paragraph (b) of this section for all of your primer-

surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations, as long as each of your electrodeposition primer systems meets the operating limits of §63.3092(a) or (b).

(3) You may choose to use one or more groupings under paragraph (a) of this section for the electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from one or more of your paint lines; and one or more groupings under paragraph (b) of this section for the primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from the remainder of your paint lines, as long as each electrodeposition primer system associated with each paint line you include in a grouping under paragraph (b) of this section meets the operating limits of §63.3092(a) or (b). For example, if your facility has three paint lines, you may choose to use one grouping under paragraph (a) of this section for two of the paint lines and a separate grouping under paragraph (b) of this section for the third paint line, as long as the electrodeposition primer system associated with the paint line you include in the grouping under paragraph (b) of this section meets the operating limits of §63.3092(a) or (b). Alternatively, you may choose to use one grouping for two of the paint lines and a separate grouping of the same type for the third paint line. Again, each electrodeposition primer system associated with each paint line you include in a grouping under paragraph (b) of this section must meet the operating limits of §63.3092(a) or (b).

(4) You may choose to consider the electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from each of your paint lines as a separate grouping under either paragraph (a) or paragraph (b) of this section. The electrodeposition primer system associated with each paint line you choose to consider in a grouping under paragraph (b) of this section must meet the operating limits of §63.3092(a) or (b). For example, if your facility has two paint lines, you may choose to use the grouping under paragraph (a) of this section for one paint line and the grouping under paragraph (b) of this section for the other paint line.

§63.3092 How must I control emissions from my electrodeposition primer system if I want to comply with the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive emission limit?

If your electrodeposition primer system meets the requirements of either paragraph (a) or (b) of this section, you may choose to comply with the emission limits of §63.3090(b) or §63.3091(b) instead of the emission limits of §63.3090(a) or §63.3091(a).

(a) Each individual material added to the electrodeposition primer system contains no more than:

(1) 1.0 percent by weight of any organic HAP; and

(2) 0.10 percent by weight of any organic HAP which is an Occupational Safety and Health Administration (OSHA)-defined carcinogen as specified in 29 CFR 1910.1200(d)(4).

(b) Emissions from all bake ovens used to cure electrodeposition primers must be captured and ducted to a control device having a destruction or removal efficiency of at least 95 percent.

§63.3093 What operating limits must I meet?

(a) You are not required to meet any operating limits for any coating operation(s) without add-on controls.

(b) Except as provided in paragraph (d) of this section, for any controlled coating operation(s), you must meet the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and add-on control systems on the coating operation(s) for which you use this option, and you must establish the operating limits during the performance test according to the requirements in §63.3167. You must meet the operating limits at all times after you establish them.

(c) If you choose to meet the emission limitations of §63.3092(b) and the emission limits of §63.3090(b) or §63.3091(b), then except as provided in paragraph (d) of this section, you must operate the capture system and add-on control device used to capture and control emissions from your electrodeposition primer bake oven(s) so that they meet the operating limits specified in Table 1 to this subpart.

(d) If you use an add-on control device other than those listed in Table 1 to this subpart, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under §63.8(f).

§63.3094 What work practice standards must I meet?

(a) [Reserved]

(b) You must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, all coating operations for which emission limits are established under §63.3090(a) through (d) or §63.3091(a) through (d). The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in paragraphs (b)(1) through (5) of this section are implemented.

(1) All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be stored in closed containers.

(2) The risk of spills of organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be minimized.

(3) Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.

(4) Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.

(5) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

(c) You must develop and implement a work practice plan to minimize organic HAP emissions from cleaning and from purging of equipment associated with all coating operations for which emission limits are established under §63.3090(a) through (d) or §63.3091(a) through (d).

(1) The plan shall, at a minimum, address each of the operations listed in paragraphs (c)(1)(i) through (viii) of this section in which you use organic-HAP-containing materials or in which there is a potential for emission of organic HAP.

(i) The plan must address vehicle body wipe emissions through one or more of the techniques listed in paragraphs (c)(1)(i)(A) through (E) of this section, or an approved alternative.

(A) Use of solvent-moistened wipes.

(B) Keeping solvent containers closed when not in use.

(C) Keeping wipe disposal/recovery containers closed when not in use.

(D) Use of tack-wipes.

(E) Use of solvents containing less than 1 percent organic HAP by weight.

(ii) The plan must address coating line purging emissions through one or more of the techniques listed in paragraphs (c)(1)(ii)(A) through (D) of this section, or an approved alternative.

(A) Air/solvent push-out.

(B) Capture and reclaim or recovery of purge materials (excluding applicator nozzles/tips).

(C) Block painting to the maximum extent feasible.

(D) Use of low-HAP or no-HAP solvents for purge.

(iii) The plan must address emissions from flushing of coating systems through one or more of the techniques listed in paragraphs (c)(1)(iii)(A) through (D) of this section, or an approved alternative.

(A) Keeping solvent tanks closed.

(B) Recovering and recycling solvents.

(C) Keeping recovered/recycled solvent tanks closed.

(D) Use of low-HAP or no-HAP solvents.

(iv) The plan must address emissions from cleaning of spray booth grates through one or more of the techniques listed in paragraphs (c)(1)(iv)(A) through (E) of this section, or an approved alternative.

(A) Controlled burn-off.

(B) Rinsing with high-pressure water (in place).

(C) Rinsing with high-pressure water (off line).

(D) Use of spray-on masking or other type of liquid masking.

(E) Use of low-HAP or no-HAP content cleaners.

(v) The plan must address emissions from cleaning of spray booth walls through one or more of the techniques listed in paragraphs (c)(1)(v)(A) through (E) of this section, or an approved alternative.

(A) Use of masking materials (contact paper, plastic sheet, or other similar type of material).

(B) Use of spray-on masking.

(C) Use of rags and manual wipes instead of spray application when cleaning walls.

(D) Use of low-HAP or no-HAP content cleaners.

(E) Controlled access to cleaning solvents.

(vi) The plan must address emissions from cleaning of spray booth equipment through one or more of the techniques listed in paragraphs (c)(1)(vi)(A) through (E) of this section, or an approved alternative.

(A) Use of covers on equipment (disposable or reusable).

(B) Use of parts cleaners (off-line submersion cleaning).

(C) Use of spray-on masking or other protective coatings.

(D) Use of low-HAP or no-HAP content cleaners.

(E) Controlled access to cleaning solvents.

(vii) The plan must address emissions from cleaning of external spray booth areas through one or more of the techniques listed in paragraphs (c)(1)(vii)(A) through (F) of this section, or an approved alternative.

(A) Use of removable floor coverings (paper, foil, plastic, or similar type of material).

(B) Use of manual and/or mechanical scrubbers, rags, or wipes instead of spray application.

(C) Use of shoe cleaners to eliminate coating track-out from spray booths.

(D) Use of booties or shoe wraps.

(E) Use of low-HAP or no-HAP content cleaners.

(F) Controlled access to cleaning solvents.

(viii) The plan must address emissions from housekeeping measures not addressed in paragraphs (c)(1)(i) through (vii) of this section through one or more of the techniques listed in paragraphs (c)(1)(viii)(A) through (C) of this section, or an approved alternative.

(A) Keeping solvent-laden articles (cloths, paper, plastic, rags, wipes, and similar items) in covered containers when not in use.

(B) Storing new and used solvents in closed containers.

(C) Transferring of solvents in a manner to minimize the risk of spills.

(2) Notwithstanding the requirements of paragraphs (c)(1)(i) through (viii) of this section, if the type of coatings used in any facility with surface coating operations subject to the requirements of this section are of such a nature that the need for one or more of the practices specified under paragraphs (c)(1)(i) through (viii) is eliminated, then the plan may include approved alternative or equivalent measures that are applicable or necessary during cleaning of storage, conveying, and application equipment.

(d) As provided in §63.6(g), we, the Environmental Protection Agency (EPA), may choose to grant you permission to use an alternative to the work practice standards in this section.

(e) The work practice plans developed in accordance with paragraphs (b) and (c) of this section are not required to be incorporated in your title V permit. Any revisions to the work practice plans developed in accordance with paragraphs (b) and (c) of this section do not constitute revisions to your title V permit.

(f) Copies of the current work practice plans developed in accordance with paragraphs (b) and (c) of this section, as well as plans developed within the preceding 5 years must be available on-site for inspection and copying by the permitting authority.

General Compliance Requirements

§63.3100 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations in §§63.3090 and 63.3091 at all times, as determined on a monthly basis.

(b) The coating operations must be in compliance with the operating limits for emission capture systems and add-on control devices required by §63.3093 at all times except during periods of startup, shutdown, and malfunction.

(c) You must be in compliance with the work practice standards in §63.3094 at all times.

(d) You must always operate and maintain your affected source including all air pollution control and monitoring equipment you use for purposes of complying with this subpart according to the provisions in §63.6(e)(1)(i).

(e) You must maintain a log detailing the operation and maintenance of the emission capture systems, add-on control devices, and continuous parameter monitoring systems (CPMS) during the period between the compliance date specified for your affected source in §63.3083 and the date when the initial emission capture system and add-on control device performance tests have been completed, as specified in §63.3160.

(f) If your affected source uses emission capture systems and add-on control devices, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3). The SSMP must address startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control devices.

[69 FR 22623, Apr. 26, 2004, as amended at 71 FR 20464, Apr. 20, 2006]

§63.3101 What parts of the General Provisions apply to me?

Table 2 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

Notifications, Reports, and Records

§63.3110 What notifications must I submit?

(a) *General.* You must submit the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.

(b) You must submit the Initial Notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after June 25, 2004, whichever is later. For an existing affected source, you must submit the Initial Notification no later than 1 year after April 26, 2004. Existing sources that have previously submitted notifications of applicability of this rule pursuant to §112(j) of the CAA are not required to submit an Initial Notification under §63.9(b) except to identify and describe all additions to the affected source made pursuant to §63.3082(c). If you elect to include the surface coating of new other motor vehicle bodies, body parts for new other motor vehicles, parts for new other motor vehicles, or aftermarket repair or replacement parts for other motor vehicles in your affected source pursuant to §63.3082(c) and your affected source has an initial startup before February 20, 2007, then you must submit an Initial Notification of this election no later than 120 days after initial startup or February 20, 2007, whichever is later.

(c) *Notification of compliance status.* If you have an existing source, you must submit the Notification of Compliance Status required by §63.9(h) no later than 30 days following the end of the initial compliance period described in §63.3160. If you have a new source, you must submit the Notification of Compliance Status required by §63.9(h) no later than 60 days after the first day of the first full month following completion of all applicable performance tests. The Notification of Compliance Status must contain the information specified in paragraphs (c)(1) through (12) of this section and in §63.9(h).

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in §63.3160 that applies to your affected source.

(4) Identification of the compliance option specified in §63.3090(a) or (b) or §63.3091(a) or (b) that you used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) in the affected source during the initial compliance period.

(5) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.

(6) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.

(i) A description and statement of the cause of the deviation.

(ii) If you failed to meet any of the applicable emission limits in §63.3090 or §63.3091, include all the calculations you used to determine the applicable emission rate or applicable average organic HAP content for the emission limit(s) that you failed to meet. You do not need to submit information provided by the materials suppliers or manufacturers, or test reports.

(7) All data and calculations used to determine the monthly average mass of organic HAP emitted per volume of applied coating solids from:

(i) The combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) if you were eligible for and chose to comply with the emission limits of §63.3090(b) or §63.3091(b); or

(ii) The combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c).

(8) All data and calculations used to determine compliance with the separate limits for electrodeposition primer in §63.3092(a) or (b) if you were eligible for and chose to comply with the emission limits of §63.3090(b) or §63.3091(b).

(9) All data and calculations used to determine the monthly mass average HAP content of materials subject to the emission limits of §63.3090(c) or (d) or the emission limits of §63.3091(c) or (d).

(10) All data and calculations used to determine the transfer efficiency for primer-surfacer and topcoat coatings, and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c).

(11) You must include the information specified in paragraphs (c)(11)(i) through (iii) of this section.

(i) For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency. Include a description of the procedure followed for measuring capture efficiency, summaries of any capture efficiency tests conducted, and any calculations supporting the capture efficiency determination. If you use the data quality objective (DQO) or lower confidence limit (LCL) approach, you must also include the statistical calculations to show you meet the DQO or LCL criteria in appendix A to subpart KK of this part. You do not need to submit complete test reports.

(ii) A summary of the results of each add-on control device performance test. You do not need to submit complete test reports unless requested.

(iii) A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.

(12) A statement of whether or not you developed and implemented the work practice plans required by §63.3094(b) and (c).

[69 FR 22623, Apr. 26, 2004, as amended at 71 FR 76927, Dec. 22, 2006]

§63.3120 What reports must I submit?

(a) *Semiannual compliance reports.* You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (9) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the CAA, as specified in paragraph (a)(2) of this section.

(1) *Dates.* Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section.

(i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in §63.3160 that applies to your affected source and ends on June 30 or December 31, whichever occurs first following the end of the initial compliance period.

(ii) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(iii) Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(iv) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the date specified in paragraph (a)(1)(iii) of this section.

(2) *Inclusion with title V report.* If you have obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice in this subpart, its submission shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation you may have to report deviations from permit requirements to the permitting authority.

(3) *General requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (iv) of this section, and the information specified in paragraphs (a)(4) through (9) and (c)(1) of this section that are applicable to your affected source.

(i) Company name and address.

(ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31.

(iv) Identification of the compliance option specified in §63.3090(b) or §63.3091(b) that you used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) in the affected source during the initial compliance period.

(4) *No deviations.* If there were no deviations from the emission limitations, operating limits, or work practices in §§63.3090, 63.3091, 63.3092, 63.3093, and 63.3094 that apply to you, the semiannual

compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If you used control devices to comply with the emission limits, and there were no periods during which the CPMS were out of control as specified in §63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out of control during the reporting period.

(5) *Deviations: adhesive, sealer, and deadener.* If there was a deviation from the applicable emission limits in §63.3090(c) and (d) or §63.3091(c) and (d), the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.

(i) The beginning and ending dates of each month during which the monthly average organic HAP content exceeded the applicable emission limit in §63.3090(c) and (d) or §63.3091(c) and (d).

(ii) The volume and organic HAP content of each material used that is subject to the applicable organic HAP content limit.

(iii) The calculation used to determine the average monthly organic HAP content for the month in which the deviation occurred.

(iv) The reason for the deviation.

(6) *Deviations: combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer and glass bonding adhesive, or combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c).* If there was a deviation from the applicable emission limits in §63.3090(a) or (b) or §63.3091(a) or (b), the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (xiv) of this section.

(i) The beginning and ending dates of each month during which the monthly organic HAP emission rate from combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) exceeded the applicable emission limit in §63.3090(a) or §63.3091(a); or the monthly organic HAP emission rate from combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) exceeded the applicable emission limit in §63.3090(b) or §63.3091(b).

(ii) The calculation used to determine the monthly organic HAP emission rate in accordance with §63.3161 or §63.3171. You do not need to submit the background data supporting these calculations, for example information provided by materials suppliers or manufacturers, or test reports.

(iii) The date and time that any malfunctions of the capture system or add-on control devices used to control emissions from these operations started and stopped.

(iv) A brief description of the CPMS.

(v) The date of the latest CPMS certification or audit.

(vi) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.

(vii) The date and time period that each CPMS was out of control, including the information in §63.8(c)(8).

(viii) The date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of each bypass of an add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(ix) A summary of the total duration and the percent of the total source operating time of the deviations from each operating limit in Table 1 to this subpart and the bypass of each add-on control device during the semiannual reporting period.

(x) A breakdown of the total duration of the deviations from each operating limit in Table 1 to this subpart and bypasses of each add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(xi) A summary of the total duration and the percent of the total source operating time of the downtime for each CPMS during the semiannual reporting period.

(xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control devices since the last semiannual reporting period.

(xiii) For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions you took to correct the deviation.

(xiv) A statement of the cause of each deviation.

(7) *Deviations: separate electrodeposition primer organic HAP content limit.* If you used the separate electrodeposition primer organic HAP content limits in §63.3092(a), and there was a deviation from these limits, the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (iii) of this section.

(i) Identification of each material used that deviated from the emission limit, and the dates and time periods each was used.

(ii) The determination of mass fraction of each organic HAP for each material identified in paragraph (a)(7)(i) of this section. You do not need to submit background data supporting this calculation, for

example, information provided by material suppliers or manufacturers, or test reports.

(iii) A statement of the cause of each deviation.

(8) *Deviations: separate electrodeposition primer bake oven capture and control limitations.* If you used the separate electrodeposition primer bake oven capture and control limitations in §63.3092(b), and there was a deviation from these limitations, the semiannual compliance report must contain the information in paragraphs (a)(8)(i) through (xii) of this section.

(i) The beginning and ending dates of each month during which there was a deviation from the separate electrodeposition primer bake oven capture and control limitations in §63.3092(b).

(ii) The date and time that any malfunctions of the capture systems or control devices used to control emissions from the electrodeposition primer bake oven started and stopped.

(iii) A brief description of the CPMS.

(iv) The date of the latest CPMS certification or audit.

(v) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.

(vi) The date, time, and duration that each CPMS was out of control, including the information in §63.8(c)(8).

(vii) The date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of each bypass of an add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(viii) A summary of the total duration and the percent of the total source operating time of the deviations from each operating limit in Table 1 to this subpart and the bypasses of each add-on control device during the semiannual reporting period.

(ix) A breakdown of the total duration of the deviations from each operating limit in Table 1 to this subpart and bypasses of each add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(x) A summary of the total duration and the percent of the total source operating time of the downtime for each CPMS during the semiannual reporting period.

(xi) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control devices since the last semiannual reporting period.

(xii) A statement of the cause of each deviation.

(9) *Deviations: work practice plans.* If there was a deviation from an applicable work practice plan

developed in accordance with §63.3094(b) or (c), the semiannual compliance report must contain the information in paragraphs (a)(9)(i) through (iii) of this section.

(i) The time period during which each deviation occurred.

(ii) The nature of each deviation.

(iii) The corrective action(s) taken to bring the applicable work practices into compliance with the work practice plan.

(b) *Performance test reports.* If you use add-on control devices, you must submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests as specified in §63.10(d)(2). You must submit reports of transfer efficiency tests no later than 60 days after completing the tests as specified in §63.10(d)(2).

(c) *Startup, shutdown, and malfunction reports.* If you used add-on control devices and you had a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section.

(1) If your actions were consistent with your SSMP, you must include the information specified in §63.10(d) in the semiannual compliance report required by paragraph (a) of this section.

(2) If your actions were not consistent with your SSMP, you must submit an immediate startup, shutdown, and malfunction report as described in paragraphs (c)(2)(i) and (ii) of this section.

(i) You must describe the actions taken during the event in a report delivered by facsimile, telephone, or other means to the Administrator within 2 working days after starting actions that are inconsistent with the plan.

(ii) You must submit a letter to the Administrator within 7 working days after the end of the event, unless you have made alternative arrangements with the Administrator as specified in §63.10(d)(5)(ii). The letter must contain the information specified in §63.10(d)(5)(ii).

§63.3130 What records must I keep?

You must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

(a) A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report.

(b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP, the density and the volume fraction of coating solids for each coating, the mass fraction of organic HAP and the density for each thinner, and the mass fraction of organic HAP for each cleaning material. If you

conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. If you use the results of an analysis conducted by an outside testing lab, you must keep a copy of the test report. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

(c) For each month, the records specified in paragraphs (c)(1) through (6) of this section.

(1) For each coating used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations and for each coating, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c), a record of the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids.

(2) For each thinner used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations and for each thinner, except for thinner used for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c), a record of the volume used in each month, the mass fraction organic HAP content, and the density.

(3) For each deadener material and for each adhesive and sealer material, a record of the mass used in each month and the mass organic HAP content.

(4) A record of the calculation of the organic HAP emission rate for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) for each month if subject to the emission limit of §63.3090(a) or §63.3091(a). This record must include all raw data, algorithms, and intermediate calculations. If the guidelines presented in the "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22), are used, you must keep records of all data input to this protocol. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. These data must be provided to the permitting authority on request on paper, and in (if calculations are done electronically) electronic form.

(5) A record of the calculation of the organic HAP emission rate for primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) for each month if subject to the emission limit of §63.3090(b) or §63.3091(b), and a record of the weight fraction of each organic HAP in each material added to the electrodeposition primer system if subject to the limitations of

§63.3092(a). This record must include all raw data, algorithms, and intermediate calculations. If the guidelines presented in the "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22), are used, you must keep records of all data input to this protocol. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. These data must be provided to the permitting authority on request on paper, and in (if calculations are done electronically) electronic form.

(6) A record, for each month, of the calculation of the average monthly mass organic HAP content of:

(i) Sealers and adhesives; and

(ii) Deadeners.

(d) A record of the name and volume of each cleaning material used during each month.

(e) A record of the mass fraction of organic HAP for each cleaning material used during each month.

(f) A record of the density for each cleaning material used during each month.

(g) A record of the date, time, and duration of each deviation, and for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

(h) The records required by §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(i) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in §63.3165(a).

(j) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§63.3164 and 63.3165(b) through (g), including the records specified in paragraphs (j)(1) through (4) of this section that apply to you.

(1) *Records for a liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure.* Records of the mass of total volatile hydrocarbon (TVH), as measured by Method 204A or F of appendix M to 40 CFR part 51, for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(2) *Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure.* Records of the mass of TVH emissions captured by the emission capture system, as measured by Method 204B or

C of appendix M to 40 CFR part 51, at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(3) *Records for panel tests.* Records needed to document a capture efficiency determination using a panel test as described in §63.3165(e) and (g), including a copy of the test report and calculations performed to convert the panel test results to percent capture efficiency values.

(4) *Records for an alternative protocol.* Records needed to document a capture efficiency determination using an alternative method or protocol, as specified in §63.3165(f), if applicable.

(k) The records specified in paragraphs (k)(1) and (2) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in §63.3166.

(1) Records of each add-on control device performance test conducted according to §§63.3164 and 63.3166.

(2) Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.

(l) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in §63.3167 and to document compliance with the operating limits as specified in Table 1 to this subpart.

(m) Records of the data and calculations you used to determine the transfer efficiency for primer-surfacer and topcoat coatings and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c).

(n) A record of the work practice plans required by §63.3094(b) and (c) and documentation that you are implementing the plans on a continuous basis. Appropriate documentation may include operational and maintenance records, records of documented inspections, and records of internal audits.

(o) For each add-on control device and for each continuous parameter monitoring system, a copy of the equipment operating instructions must be maintained on-site for the life of the equipment in a location readily available to plant operators and inspectors. You may prepare your own equipment operating instructions, or they may be provided to you by the equipment supplier or other third party.

[69 FR 22623, Apr. 26, 2004, as amended at 72 FR 20233, Apr. 24, 2007]

§63.3131 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.

(b) Except as provided in §63.3130(o), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, as specified in §63.10(b)(1).

(c) Except as provided in §63.3130(o), you must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You may keep the records off site for the remaining 3 years.

Compliance Requirements for Adhesive, Sealer, and Deadener

§63.3150 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3151. The initial compliance period begins on the applicable compliance date specified in §63.3083 and ends on the last day of the month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next month. You must determine the mass average organic HAP content of the materials used each month for each group of materials for which an emission limitation is established in §63.3090(c) and (d) or §63.3091(c) and (d). The initial compliance demonstration includes the calculations according to §63.3151 and supporting documentation showing that during the initial compliance period, the mass average organic HAP content for each group of materials was equal to or less than the applicable emission limits in §63.3090(c) and (d) or §63.3091(c) and (d).

§63.3151 How do I demonstrate initial compliance with the emission limitations?

You must separately calculate the mass average organic HAP content of the materials used during the initial compliance period for each group of materials for which an emission limit is established in §63.3090(c) and (d) or §63.3091(c) and (d). If every individual material used within a group of materials meets the emission limit for that group of materials, you may demonstrate compliance with that emission limit by documenting the name and the organic HAP content of each material used during the initial compliance period. If any individual material used within a group of materials exceeds the emission limit for that group of materials, you must determine the mass average organic HAP content according to the procedures of paragraph (d) of this section.

(a) *Determine the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each material used during the compliance period by using one of the options in paragraphs (a)(1) through (5) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass

fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test.

(i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for OSHA-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4), and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (*e.g.,* 0.3791).

(ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (*e.g.,* 0.7638 truncates to 0.763).

(2) *Method 24 (appendix A to 40 CFR part 60).* For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP.

(3) *Alternative method.* You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(4) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4), and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence, unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(5) *Solvent blends.* Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When neither test data nor manufacturer's data for solvent blends are available, you may use the default values for the mass fraction of organic HAP in the solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries, and you may only use Table 4 if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you only know whether the blend is aliphatic or aromatic. However, if the results of a Method 311 test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence, unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the data from Table 3 or 4 are correct.

(b) *Determine the density of each material used.* Determine the density of each material used during the compliance period from test results using ASTM Method D1475-98 (Reapproved 2003), "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), or for powder coatings, test method A or test method B of ASTM Method D5965-02, "Standard Test Methods for Specific Gravity of Coating Powders," (incorporated by reference, see §63.14), or information from the supplier or manufacturer of the material. If there is disagreement between ASTM Method D1475-98 (Reapproved 2003) test results or ASTM Method D5965-02, test method A or test method B test results and the supplier's or manufacturer's information, the test results will take precedence unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(c) *Determine the volume of each material used.* Determine the volume (liters) of each material used during each month by measurement or usage records.

(d) *Determine the mass average organic HAP content for each group of materials.* Determine the mass average organic HAP content of the materials used during the initial compliance period for each group of materials for which an emission limit is established in §63.3090(c) and (d) or §63.3091(c) and (d), using Equations 1 and 2 of this section.

(1) Calculate the mass average organic HAP content of adhesive and sealer materials other than components of the glass bonding system used in the initial compliance period using Equation 1 of this section:

$$C_{avg,as} = \frac{\sum_{j=1}^{r} \left(Vol_{as,j}\right)\left(D_{as,j}\right)\left(W_{as,j}\right)}{\sum_{j=1}^{r} \left(Vol_{as,j}\right)\left(D_{as,j}\right)} \qquad (Eq.\ 1)$$

Where:

$C_{avg,\ as}$ = Mass average organic HAP content of adhesives and sealer materials used, kg/kg.

$Vol_{as,\ j}$ = Volume of adhesive or sealer material, j, used, liters.

$D_{as,\ j}$ = Density of adhesive or sealer material, j, used, kg per liter.

$W_{as,\ j}$ = Mass fraction of organic HAP in adhesive or sealer material, j, kg/kg.

r = Number of adhesive and sealer materials used.

(2) Calculate the mass average organic HAP content of deadener materials used in the initial compliance period using Equation 2 of this section:

$$C_{avg,d} = \frac{\sum_{m=1}^{s} (Vol_{d,m})(D_{d,m})(W_{d,m})}{\sum_{m=1}^{s} (Vol_{d,m})(D_{d,m})} \qquad (Eq.\ 2)$$

Where:

$C_{avg,\ d}$ = Mass average organic HAP content of deadener material used, kg/kg.

$Vol_{d,\ m}$ = Volume of deadener material, m, used, liters.

$D_{d,\ m}$ = Density of deadener material, m, used, kg per liter.

$W_{d,\ m}$ = Mass fraction of organic HAP in deadener material, m, kg/kg.

s = Number of deadener materials used.

(e) *Compliance demonstration.* The mass average organic HAP content for the compliance period must be less than or equal to the applicable emission limit in §63.3090(c) and (d) or §63.3091(c) and (d). You must keep all records as required by §§63.3130 and 63.3131. As part of the Notification of Compliance Status required by §63.3110, you must submit a statement that the coating operations were in compliance with the emission limitations during the initial compliance period because the mass average organic HAP content was less than or equal to the applicable emission limits in §63.3090(c) and (d) or §63.3091(c) and (d), determined according to this section.

§63.3152 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance, the mass average organic HAP content for each compliance period, determined according to §63.3151(a) through (d), must be less than or equal to the applicable emission limit in §63.3090(c) and (d) or §63.3091(c) and (d). A compliance period consists of 1 month. Each month after the end of the initial compliance period described in §63.3150 is a compliance period consisting of that month.

(b) If the mass average organic HAP emission content for any compliance period exceeds the applicable emission limit in §63.3090(c) and (d) or §63.3091(c) and (d), this is a deviation from the emission limitations for that compliance period and must be reported as specified in §§63.3110(c)(6) and 63.3120(a)(5).

(c) You must maintain records as specified in §§63.3130 and 63.3131.

Compliance Requirements for the Combined Electrodeposition Primer, Primer-Surfacer, Topcoat, Final Repair, Glass Bonding Primer, and Glass Bonding Adhesive Emission Limitations

§63.3160 By what date must I conduct performance tests and other initial compliance demonstrations?

(a) *New and reconstructed affected sources.* For a new or reconstructed affected source, you must meet the requirements of paragraphs (a)(1) through (4) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in §63.3083. You must conduct a performance test of each capture system and add-on control device according to §§63.3164 through 63.3166 and establish the operating limits required by §63.3093 no later than 180 days after the applicable compliance date specified in §63.3083.

(2) You must develop and begin implementing the work practice plans required by §63.3094(b) and (c) no later than the compliance date specified in §63.3083.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3161. The initial compliance period begins on the applicable compliance date specified in §63.3083 and ends on the last day of the month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next month. You must determine the mass of organic HAP emissions and volume of coating solids deposited in the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§63.3164 through 63.3166; supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the emission limit in §63.3090(a); the operating limits established during the performance tests and the results of the continuous parameter monitoring required by §63.3168; and documentation of whether you developed and implemented the work practice plans required by §63.3094(b) and (c).

(4) You do not need to comply with the operating limits for the emission capture system and add-on control device required by §63.3093 until after you have completed the performance tests specified in paragraph (a)(1) of this section. Instead, you must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and CPMS during the period between the compliance date and the performance test. You must begin complying with the operating limits for your affected source on the date you complete the performance tests specified in paragraph (a)(1) of this section.

(b) *Existing affected sources.* For an existing affected source, you must meet the requirements of paragraphs (b)(1) through (3) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in §63.3083. You must conduct a performance test of each capture system and add-on control device according to the procedures in §§63.3164 through 63.3166 and establish the operating limits required by §63.3093 no later than the compliance date specified in §63.3083.

(2) You must develop and begin implementing the work practice plans required by §63.3094(b) and (c)

no later than the compliance date specified in §63.3083.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3161. The initial compliance period begins on the applicable compliance date specified in §63.3083 and ends on the last day of the month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next month. You must determine the mass of organic HAP emissions and volume of coating solids deposited during the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§63.3164 through 63.3166; supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the emission limits in §63.3091(a); the operating limits established during the performance tests and the results of the continuous parameter monitoring required by §63.3168; and documentation of whether you developed and implemented the work practice plans required by §63.3094(b) and (c).

(c) You are not required to conduct an initial performance test to determine capture efficiency or destruction efficiency of a capture system or control device if you receive approval to use the results of a performance test that has been previously conducted on that capture system (either a previous stack test or a previous panel test) or control device. You are not required to conduct an initial test to determine transfer efficiency if you receive approval to use the results of a test that has been previously conducted. Any such previous tests must meet the conditions described in paragraphs (c)(1) through (3) of this section.

(1) The previous test must have been conducted using the methods and conditions specified in this subpart.

(2) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test reliably demonstrate compliance despite process or equipment changes.

(3) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the required operating parameters.

§63.3161 How do I demonstrate initial compliance?

(a) You must meet all of the requirements of this section to demonstrate initial compliance. To demonstrate initial compliance, the organic HAP emissions from the combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) must meet the applicable emission limitation in §63.3090(a) or §63.3091(a).

(b) *Compliance with operating limits.* Except as provided in §63.3160(a)(4), you must establish and

demonstrate continuous compliance during the initial compliance period with the operating limits required by §63.3093, using the procedures specified in §§63.3167 and 63.3168.

(c) *Compliance with work practice requirements.* You must develop, implement, and document your implementation of the work practice plans required by §63.3094(b) and (c) during the initial compliance period, as specified in §63.3130.

(d) *Compliance with emission limits.* You must follow the procedures in paragraphs (e) through (o) of this section to demonstrate compliance with the applicable emission limit in §63.3090(a) or §63.3091(a). You may also use the guidelines presented in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22) in making this demonstration.

(e) *Determine the mass fraction of organic HAP, density, and volume used.* Follow the procedures specified in §63.3151(a) through (c) to determine the mass fraction of organic HAP and the density and volume of each coating and thinner used during each month. For electrodeposition primer operations, the mass fraction of organic HAP, density, and volume used must be determined for each material added to the tank or system during each month.

(f) *Determine the volume fraction of coating solids for each coating.* You must determine the volume fraction of coating solids (liter of coating solids per liter of coating) for each coating used during the compliance period by a test or by information provided by the supplier or the manufacturer of the material, as specified in paragraphs (f)(1) and (2) of this section. For electrodeposition primer operations, the volume fraction of solids must be determined for each material added to the tank or system during each month. If test results obtained according to paragraph (f)(1) of this section do not agree with the information obtained under paragraph (f)(2) of this section, the test results will take precedence unless, after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(1) *ASTM Method D2697-86 (Reapproved 1998) or ASTM Method D6093-97 (Reapproved 2003).* You may use ASTM Method D2697-86 (Reapproved 1998), "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings" (incorporated by reference, see §63.14), or ASTM Method D6093-97 (Reapproved 2003), "Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer" (incorporated by reference, see §63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.

(2) *Information from the supplier or manufacturer of the material.* You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.

(g) *Determine the transfer efficiency for each coating.* You must determine the transfer efficiency for each primer-surfacer and topcoat coating, and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the

affected source pursuant to §63.3082(c) using ASTM Method D5066-91 (Reapproved 2001), "Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis" (incorporated by reference, see §63.14), or the guidelines presented in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). You may conduct transfer efficiency testing on representative coatings and for representative spray booths as described in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). You may assume 100 percent transfer efficiency for electrodeposition primer coatings, glass bonding primers, and glass bonding adhesives. For final repair coatings, you may assume 40 percent transfer efficiency for air atomized spray and 55 percent transfer efficiency for electrostatic spray and high volume, low pressure spray. For blackout, chip resistant edge primer, interior color, in-line repair, lower body anti-chip coatings, or underbody anti-chip coatings, you may assume 40 percent transfer efficiency for air atomized spray, 55 percent transfer efficiency for electrostatic spray and high volume-low pressure spray, and 80 percent transfer efficiency for airless spray.

(h) *Calculate the total mass of organic HAP emissions before add-on controls.* Calculate the total mass of organic HAP emissions before consideration of add-on controls from all coatings and thinners used during each month in the combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) using Equation 1 of this section:

$$H_{BC} = A + B \qquad (Eq.\ 1)$$

Where:

H_{BC} = Total mass of organic HAP emissions before consideration of add-on controls during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners used during the month, kg, as calculated in Equation 1B of this section.

(1) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this section:

$$A = \sum_{i=1}^{m} \left(Vol_{ci}\right)\left(D_{ci}\right)\left(W_{ci}\right) \qquad (Eq.\ 1A)$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

$Vol_{c,\ i}$ = Total volume of coating, i, used during the month, liters.

$D_{c,\ i}$ = Density of coating, i, kg coating per liter coating.

$W_{c,\ i}$ = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating.

m = Number of different coatings used during the month.

(2) Calculate the kg of organic HAP in the thinners used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad (Eq.\ 1B)$$

Where:

B = Total mass of organic HAP in the thinners used during the month, kg.

$Vol_{t,\ j}$ = Total volume of thinner, j, used during the month, liters.

$D_{t,\ j}$ = Density of thinner, j, kg per liter.

$W_{t,\ j}$ = Mass fraction of organic HAP in thinner, j, kg organic HAP per kg thinner.

n = Number of different thinners used during the month.

(i) *Calculate the organic HAP emission reduction for each controlled coating operation.* Determine the mass of organic HAP emissions reduced for each controlled coating operation during each month. The emission reduction determination quantifies the total organic HAP emissions captured by the emission capture system and destroyed or removed by the add-on control device. Use the procedures in paragraph (j) of this section to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. For each controlled coating operation using a solvent recovery system for which you conduct a liquid-liquid material balance, use the procedures in paragraph (k) of this section to calculate the organic HAP emission reduction.

(j) *Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balances.* For each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances, calculate the mass of organic HAP emission reduction for the controlled coating operation, excluding all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture

system or control device serving the controlled coating operation occurred, during the month using Equation 2 of this section. The calculation of mass of organic HAP emission reduction for the controlled coating operation during the month applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings and thinners that are used in the coating operation served by the emission capture system and add-on control device during each month. Except as provided in paragraph (p) of this section, for any period of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement of the capture system or control device serving the controlled coating operation occurred, you must assume zero efficiency for the emission capture system and add-on control device. Equation 2 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation.

$$H_{Cn} = \left(A_C + B_C - A_{unc} - B_{unc}\right)\left(\frac{CE}{100} \times \frac{DRE}{100}\right) \qquad (Eq.\ 2)$$

Where:

H_{Cn} = Mass of organic HAP emission reduction, excluding all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred, for the controlled coating operation during the month, kg.

A_C = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 2A of this section.

B_C = Total mass of organic HAP in the thinners used in the controlled coating operation during the month, kg, as calculated in Equation 2B of this section.

A_{unc} = Total mass of organic HAP in the coatings used during all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred for the controlled coating operation during the month, kg, as calculated in Equation 2C of this section.

B_{unc} = Total mass of organic HAP in the thinners used during all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred for the controlled coating operation during the month, kg, as calculated in Equation 2D of this section.

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§63.3164 and 63.3165 to measure and record capture efficiency.

DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§63.3164 and 63.3166 to measure and record the organic HAP destruction or removal efficiency.

(1) Calculate the mass of organic HAP in the coatings used in the controlled coating operation, kg, using Equation 2A of this section.

$$A_c = \sum_{i=1}^{m} (Vol_{c,i})(D_{c,i})(W_{c,i}) \qquad (Eq.\ 2A)$$

Where:

A_C = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg.

$Vol_{c,\ i}$ = Total volume of coating, i, used during the month, liters.

$D_{c,\ i}$ = Density of coating, i, kg per liter.

$W_{c,\ i}$ = Mass fraction of organic HAP in coating, i, kg per kg.

m = Number of different coatings used.

(2) Calculate the mass of organic HAP in the thinners used in the controlled coating operation, kg, using Equation 2B of this section.

$$B_c = \sum_{j=1}^{n} (Vol_{t,j})(D_{t,j})(W_{t,j}) \qquad (Eq.\ 2B)$$

Where:

B_C = Total mass of organic HAP in the thinners used in the controlled coating operation during the month, kg.

$Vol_{t,\ j}$ = Total volume of thinner, j, used during the month, liters.

$D_{t,\ j}$ = Density of thinner, j, kg per liter.

$W_{t,\ j}$ = Mass fraction of organic HAP in thinner, j, kg per kg.

n = Number of different thinners used.

(3) Calculate the mass of organic HAP in the coatings used in the controlled coating operation during deviations specified in §63.3163(c) and (d), using Equation 2C of this section:

$$A_{unc} = \sum_{i=1}^{m} (VOLD_i)(D_i)(W_i) \qquad (Eq.\ 2C)$$

Where:

A_{unc} = Total mass of organic HAP in the coatings used during all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred for the controlled coating operation during the month, kg.

$VOLD_i$ = Total volume of coating, i, used in the controlled coating operation during deviations, liters.

D_i = Density of coating, i, kg per liter.

W_i = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating.

m = Number of different coatings.

(4) Calculate the mass of organic HAP in the thinners used in the controlled coating operation during deviations specified in §63.3163(c) and (d), using Equation 2D of this section:

$$B_{unc} = \sum_{j=1}^{n} (VOLD_j)(D_j)(W_j) \qquad (Eq.\ 2D)$$

Where:

B_{unc} = Total mass of organic HAP in the thinners used during all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred for the controlled coating operation during the month, kg.

$VOLD_j$ = Total volume of thinner, j, used in the controlled coating operation during deviations, liters.

D_j = Density of thinner, j, kg per liter.

W_h = Mass fraction of organic HAP in thinner, j, kg organic HAP per kg coating.

n = Number of different thinners.

(k) *Calculate the organic HAP emission reduction for each controlled coating operation using liquid-liquid material balances.* For each controlled coating operation using a solvent recovery system for which you conduct liquid-liquid material balances, calculate the mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system using a liquid-liquid material balance during the month by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings and thinners used in the coating operation controlled by the

solvent recovery system during each month. Perform a liquid-liquid material balance for each month as specified in paragraphs (k)(1) through (6) of this section. Calculate the mass of organic HAP emission reduction by the solvent recovery system as specified in paragraph (k)(7) of this section.

(1) For each solvent recovery system, install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system each month. The device must be initially certified by the manufacturer to be accurate to within ±2.0 percent of the mass of volatile organic matter recovered.

(2) For each solvent recovery system, determine the mass of volatile organic matter recovered for the month, kg, based on measurement with the device required in paragraph (k)(1) of this section.

(3) Determine the mass fraction of volatile organic matter for each coating and thinner used in the coating operation controlled by the solvent recovery system during the month, kg volatile organic matter per kg coating. You may determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A, or an EPA approved alternative method, or you may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix A, or an approved alternative method, the test method results will govern unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(4) Determine the density of each coating and thinner used in the coating operation controlled by the solvent recovery system during the month, kg per liter, according to §63.3151(b).

(5) Measure the volume of each coating and thinner used in the coating operation controlled by the solvent recovery system during the month, liters.

(6) Each month, calculate the solvent recovery system's volatile organic matter collection and recovery efficiency, using Equation 3 of this section:

$$R_v = 100 \frac{M_{VR}}{\sum_{i=1}^{m} Vol_i D_i WV_{c,i} + \sum_{j=1}^{n} Vol_j D_j WV_{t,j}} \qquad (Eq.\ 3)$$

Where:

R_V = Volatile organic matter collection and recovery efficiency of the solvent recovery system during the month, percent.

M_{VR} = Mass of volatile organic matter recovered by the solvent recovery system during the month, kg.

Vol_i = Volume of coating, i, used in the coating operation controlled by the solvent recovery system during the month, liters.

D_i = Density of coating, i, kg per liter.

$WV_{c,\ i}$ = Mass fraction of volatile organic matter for coating, i, kg volatile organic matter per kg coating.

Vol_j = Volume of thinner, j, used in the coating operation controlled by the solvent recovery system during the month, liters.

D_j = Density of thinner, j, kg per liter.

$WV_{t,\ j}$ = Mass fraction of volatile organic matter for thinner, j, kg volatile organic matter per kg thinner.

m = Number of different coatings used in the coating operation controlled by the solvent recovery system during the month.

n = Number of different thinners used in the coating operation controlled by the solvent recovery system during the month.

(7) Calculate the mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system during the month, using Equation 4 of this section:

$$H_{CSR} = \left(A_{CSR} + B_{CSR}\right)\left(\frac{R_V}{100}\right) \qquad (Eq.\ 4)$$

Where:

H_{CSR} = Mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system using a liquid-liquid material balance during the month, kg.

A_{CSR} = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 4A of this section.

B_{CSR} = Total mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 4B of this section.

R_V = Volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 3 of this section.

(i) Calculate the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, using Equation 4A of this section.

$$A_{CSR} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad (Eq.\ 4A)$$

Where:

A_{CSR} = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent

recovery system during the month, kg.

$Vol_{c,\ i}$ = Total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{c,\ i}$ = Density of coating, i, kg per liter.

$W_{c,\ i}$ = Mass fraction of organic HAP in coating, i, kg per kg.

m = Number of different coatings used.

(ii) Calculate the mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system, kg, using Equation 4B of this section.

$$B_{CSR} = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad (Eq.\ 4B)$$

Where:

B_{CSR} = Total mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{t,\ j}$ = Total volume of thinner, j, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{t,\ j}$ = Density of thinner, j, kg per liter.

$W_{t,\ j}$ = Mass fraction of organic HAP in thinner, j, kg per kg.

n = Number of different thinners used.

(l) *Calculate the total volume of coating solids deposited.* Determine the total volume of coating solids deposited, liters, in the combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems used in coating operations added to the affected source pursuant to §63.3082(c) using Equation 5 of this section:

$$V_{sdep} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(V_{s,i}\right)\left(TE_{c,i}\right) \qquad (Eq.\ 5)$$

Where:

V_{sdep} = Total volume of coating solids deposited during the month, liters.

$Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.

$V_{s,i}$ = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3161(f).

$TE_{c,i}$ = Transfer efficiency of coating, i, determined according to §63.3161(g), expressed as a decimal, for example 60 percent must be expressed as 0.60.

M = Number of coatings used during the month.

(m) *Calculate the mass of organic HAP emissions for each month.* Determine the mass of organic HAP emissions, kg, during each month, using Equation 6 of this section.

$$H_{HAP} = H_{BC} - \sum_{i=1}^{q} \left(H_{Cn,i}\right) - \sum_{j=1}^{r} \left(H_{CSR,j}\right) - \sum_{k=1}^{q} \sum_{m=1}^{S_k} \left(H_{DEV,k,m}\right) \qquad (Eq.\ 6)$$

Where:

H_{HAP} = Total mass of organic HAP emissions for the month, kg.

H_{BC} = Total mass of organic HAP emissions before add-on controls from all the coatings and thinners used during the month, kg, determined according to paragraph (h) of this section.

$H_{Cn,\ i}$ = Total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, excluding all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred, for the controlled coating operation during the month, from Equation 2 of this section.

$H_{CSR,\ j}$ = Total mass of organic HAP emission reduction for coating operation, j, controlled by a solvent recovery system using a liquid-liquid material balance, during the month, kg, from Equation 4 of this section.

$H_{DEV,\ k,\ m}$ = Mass of organic HAP emission reduction, based on the capture system and control device efficiency approved under paragraph (p) of this section for period of deviation, m, for controlled coating operation, k, kg, as determined using Equation 8 of this section.

q = Number of controlled coating operations not using a liquid-liquid material balance.

r = Number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

S_k = Number of periods of deviation in the month for which non-zero capture and control device efficiencies have been approved for controlled coating operation, k.

(n) *Calculate the organic HAP emission rate for the month.* Determine the organic HAP emission rate for the month, kg organic HAP per liter coating solids deposited, using Equation 7 of this section:

$$H_{rate} = (H_{HAP})/(V_{sdep}) \qquad (Eq.\ 7)$$

Where:

H_{rate} = Organic HAP emission rate for the month compliance period, kg organic HAP per liter coating solids deposited.

H_{HAP} = Mass of organic HAP emissions for the month, kg, determined according to Equation 6 of this section.

V_{sdep} = Total volume of coating solids deposited during the month, liters, from Equation 5 of this section.

(o) *Compliance demonstration.* To demonstrate initial compliance, the organic HAP emissions from the combined electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) must be less than or equal to the applicable emission limitation in §63.3090(a) or §63.3091(a). You must keep all records as required by §§63.3130 and 63.3131. As part of the Notification of Compliance Status required by §63.3110, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.3090(a) or §63.3091(a) and you achieved the operating limits required by §63.3093 and the work practice standards required by §63.3094.

(p) You may request approval from the Administrator to use non-zero capture efficiencies and add-on control device efficiencies for any period of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or add-on control device serving a controlled coating operation occurred.

(1) If you have manually collected parameter data indicating that a capture system or add-on control device was operating normally during a CPMS malfunction, a CPMS out-of-control period, or associated repair, then these data may be used to support and document your request to use the normal capture efficiency or add-on control device efficiency for that period of deviation.

(2) If you have data indicating the actual performance of a capture system or add-on control device (*e.g.,* capture efficiency measured at a reduced flow rate or add-on control device efficiency measured at a reduced thermal oxidizer temperature) during a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or add-on control device serving a controlled coating operation, then these data may be used to support and document your request to use these values for that period of deviation.

(3) The organic HAP emission reduction achieved during each period of deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS

requirement for the capture system or add-on control device serving a controlled coating operation for which the Administrator has approved the use of non-zero capture efficiency and add-on control device efficiency values is calculated using Equation 8 of this section.

$$H_{DEV} = \left(A_{DEV} + B_{DEV}\right)\left(\frac{CE_{DEV}}{100}\right)\left(\frac{DRE_{DEV}}{100}\right) \qquad (Eq.\ 8)$$

Where:

H_{DEV} = Mass of organic HAP emission reduction achieved during a period of deviation for the controlled coating operation, kg.

A_{DEV} = Total mass of organic HAP in the coatings used in the controlled coating operation during the period of deviation, kg, as calculated in Equation 8A of this section.

B_{DEV} = Total mass of organic HAP in the thinners used in the controlled coating operation during the period of deviation, kg, as calculated in Equation 8B of this section.

CE_{DEV} = Capture efficiency of the emission capture system vented to the add-on control device, approved for the period of deviation, percent.

DRE_{DEV} = Organic HAP destruction or removal efficiency of the add-on control device approved for the period of deviation, percent.

(4) Calculate the total mass of organic HAP in the coatings used in the controlled coating operation during the period of deviation using equation 8A of this section:

$$A_{DEV} = \sum_{i=i}^{m}\left(VOL_{CDEV,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad (Eq.\ 8A)$$

Where:

A_{DEV} = Total mass of organic HAP in the coatings used in the controlled coating operation during the period of deviation, kg.

$VOL_{CDEV,\ i}$ = total volume of coating, i, used in the controlled coating operation during the period of deviation, liters.

$D_{c,\ i}$ = Density of coating, i, kg per liter.

$W_{c,\ i}$ = Mass fraction of organic HAP in coating, i, kg per kg.

m = Number of different coatings used.

(5) Calculate the total mass of organic HAP in the thinners used in the controlled coating operation during the period of deviation using equation 8B of this section:

$$B_{DEV} = \sum_{j=1}^{n} \left(VOL_{TDEV,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad (Eq.\ 8B)$$

Where:

B_{DEV} = Total mass of organic HAP in the thinners used in the controlled coating operation during the period of deviation, kg.

$VOL_{TDEV,\ j}$ = Total volume of thinner, j, used in the controlled coating operation during the period of deviation, liters.

$D_{t,\ j}$ = Density of thinner, j, kg per liter.

$W_{t,\ j}$ = Mass fraction of organic HAP in thinner, j, kg per kg.

n = Number of different thinners used.

[69 FR 22623, Apr. 26, 2004, as amended at 72 FR 20233, Apr. 24, 2007]

§63.3162 [Reserved]

§63.3163 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance with the applicable emission limit in §63.3090(a) or §63.3091(a), the organic HAP emission rate for each compliance period, determined according to the procedures in §63.3161, must be equal to or less than the applicable emission limit in §63.3090(a) or §63.3091(a). A compliance period consists of 1 month. Each month after the end of the initial compliance period described in §63.3160 is a compliance period consisting of that month. You must perform the calculations in §63.3161 on a monthly basis.

(b) If the organic HAP emission rate for any 1 month compliance period exceeded the applicable emission limit in §63.3090(a) or §63.3091(a), this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.3110(c)(6) and 63.3120(a)(6).

(c) You must demonstrate continuous compliance with each operating limit required by §63.3093 that applies to you, as specified in Table 1 to this subpart.

(1) If an operating parameter is out of the allowed range specified in Table 1 to this subpart, this is a deviation from the operating limit that must be reported as specified in §§63.3110(c)(6) and 63.3120(a)(6).

(2) If an operating parameter deviates from the operating limit specified in Table 1 to this subpart, then you must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation except as provided in §63.3161(p).

(d) You must meet the requirements for bypass lines in §63.3168(b) for control devices other than

solvent recovery systems for which you conduct liquid-liquid material balances. If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, this is a deviation that must be reported as specified in §63.3110(c)(6) and 63.3120(a)(6). For the purposes of completing the compliance calculations specified in §63.3161(k), you must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation.

(e) You must demonstrate continuous compliance with the work practice standards in §63.3094. If you did not develop a work practice plan, if you did not implement the plan, or if you did not keep the records required by §63.3130(n), this is a deviation from the work practice standards that must be reported as specified in §§63.3110(c)(6) and 63.3120(a)(6).

(f) If there were no deviations from the emission limitations, submit a statement as part of the semiannual compliance report that you were in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.3090(a) or §63.3091(a), and you achieved the operating limits required by §63.3093 and the work practice standards required by §63.3094 during each compliance period.

(g) [Reserved]

(h) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The Administrator will determine whether deviations that occur during a period you identify as a startup, shutdown, or malfunction are violations according to the provisions in §63.6(e).

(i) [Reserved]

(j) You must maintain records as specified in §§63.3130 and 63.3131.

[69 FR 22623, Apr. 26, 2004, as amended at 71 FR 20464, Apr. 20, 2006]

§63.3164 What are the general requirements for performance tests?

(a) You must conduct each performance test required by §63.3160 according to the requirements in §63.7(e)(1) and under the conditions in this section unless you obtain a waiver of the performance test according to the provisions in §63.7(h).

(1) *Representative coating operation operating conditions.* You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or malfunction, and during periods of nonoperation do not constitute representative

conditions. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation.

(2) *Representative emission capture system and add-on control device operating conditions.* You must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. You must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

(b) You must conduct each performance test of an emission capture system according to the requirements in §63.3165. You must conduct each performance test of an add-on control device according to the requirements in §63.3166.

§63.3165 How do I determine the emission capture system efficiency?

You must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by §63.3160. For purposes of this subpart, a spray booth air seal is not considered a natural draft opening in a PTE or a temporary total enclosure provided you demonstrate that the direction of air movement across the interface between the spray booth air seal and the spray booth is into the spray booth. For purposes of this subpart, a bake oven air seal is not considered a natural draft opening in a PTE or a temporary total enclosure provided you demonstrate that the direction of air movement across the interface between the bake oven air seal and the bake oven is into the bake oven. You may use lightweight strips of fabric or paper, or smoke tubes to make such demonstrations as part of showing that your capture system is a PTE or conducting a capture efficiency test using a temporary total enclosure. You cannot count air flowing from a spray booth air seal into a spray booth as air flowing through a natural draft opening into a PTE or into a temporary total enclosure unless you elect to treat that spray booth air seal as a natural draft opening. You cannot count air flowing from a bake oven air seal into a bake oven as air flowing through a natural draft opening into a PTE or into a temporary total enclosure unless you elect to treat that bake oven air seal as a natural draft opening.

(a) *Assuming 100 percent capture efficiency.* You may assume the capture system efficiency is 100 percent if both of the conditions in paragraphs (a)(1) and (2) of this section are met:

(1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device.

(2) All coatings and thinners used in the coating operation are applied within the capture system, and coating solvent flash-off and coating curing and drying occurs within the capture system. For example, this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.

(b) *Measuring capture efficiency.* If the capture system does not meet both of the criteria in paragraphs

(a)(1) and (2) of this section, then you must use one of the five procedures described in paragraphs (c) through (g) of this section to measure capture efficiency. The capture efficiency measurements use TVH capture efficiency as a surrogate for organic HAP capture efficiency. For the protocols in paragraphs (c) and (d) of this section, the capture efficiency measurement must consist of three test runs. Each test run must be at least 3 hours duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single part to go from the beginning to the end of production, which includes surface preparation activities and drying or curing time.

(c) *Liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure.* The liquid-to-uncaptured-gas protocol compares the mass of liquid TVH in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (c)(1) through (6) of this section to measure emission capture system efficiency using the liquid-to-uncaptured-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the coating operation where coatings and thinners are applied, and all areas where emissions from these applied coatings and thinners subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions for routing to an add-on control device, such as the entrance and exit areas of an oven or spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204A or F of appendix M to 40 CFR part 51 to determine the mass fraction of TVH liquid input from each coating and thinner used in the coating operation during each capture efficiency test run. To make the determination, substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods.

(3) Use Equation 1 of this section to calculate the total mass of TVH liquid input from all the coatings and thinners used in the coating operation during each capture efficiency test run.

$$TVH_{used} = \sum_{i=1}^{n} (TVH_i)(Vol_i)(D_i) \qquad (Eq.\ 1)$$

Where:

TVH_i = Mass fraction of TVH in coating or thinner, i, used in the coating operation during the capture efficiency test run, kg TVH per kg material.

Vol_i = Total volume of coating or thinner, i, used in the coating operation during the capture efficiency test run, liters.

D_i = Density of coating or thinner, i, kg material per liter material.

n = Number of different coatings and thinners used in the coating operation during the capture efficiency test run.

(4) Use Method 204D or E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D if the enclosure is a temporary total enclosure.

(ii) Use Method 204E if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(5) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 2 of this section:

$$CE = \frac{\left(TVH_{used} - TVH_{uncaptured}\right)}{TVH_{used}} \times 100 \qquad (Eq.\ 2)$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

TVH_{used} = Total mass of TVH liquid input used in the coating operation during the capture efficiency test run, kg.

$TVH_{uncaptured}$ = Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

(6) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(d) *Gas-to-gas protocol using a temporary total enclosure or a building enclosure.* The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (d)(1) through (5) of this section to measure emission capture system efficiency using the gas-to-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the coating operation where coatings and thinners are applied, and all areas where emissions from these applied coatings and thinners subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions generated by the coating operation for routing to an

add-on control device, such as the entrance and exit areas of an oven or a spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204B or C of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) The sampling points for the Method 204B or C measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and entering the add-on control device.

(ii) If multiple emission streams from the capture system enter the add-on control device without a single common duct, then the emissions entering the add-on control device must be simultaneously or sequentially measured in each duct, and the total emissions entering the add-on control device must be determined.

(3) Use Method 204D or E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D if the enclosure is a temporary total enclosure.

(ii) Use Method 204E if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(4) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 3 of this section:

$$CE = \frac{TVH_{captured}}{\left(TVH_{captured} + TVH_{uncaptured}\right)} \times 100 \qquad \text{(Eq. 3)}$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

$TVH_{captured}$ = Total mass of TVH captured by the emission capture system as measured at the inlet to the add-on control device during the emission capture efficiency test run, kg.

$TVH_{uncaptured}$ = Total mass of TVH that is not captured by the emission capture system and that exits from

the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

(5) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(e) *Panel testing to determine the capture efficiency of flash-off or bake oven emissions.* You may conduct panel testing to determine the capture efficiency of flash-off or bake oven emissions using ASTM Method D5087-02, "Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement)" (incorporated by reference, see §63.14), ASTM Method D6266-00a, "Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released from Waterborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement)" (incorporated by reference, see §63.14), or the guidelines presented in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). You may conduct panel testing on representative coatings as described in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). The results of these panel testing procedures are in units of mass of VOC per volume of coating solids deposited and must be converted to a percent value for use in this subpart. If you panel test representative coatings, then you may convert the panel test result for each representative coating either to a unique percent capture efficiency for each coating grouped with that representative coating by using coating specific values for the volume of coating solids deposited per volume of coating used, mass of VOC per volume of coating, volume fraction solids, transfer efficiency, density and mass fraction VOC in Equations 4 through 6 of this section; or to a composite percent capture efficiency for the group of coatings by using composite values for the group of coatings for the volume of coating solids deposited per volume of coating used and for the mass of VOC per volume of coating, and average values for the group of coatings for volume fraction solids, transfer efficiency, density and mass fraction VOC in Equations 4 through 6 of this section. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency for that coating by using coating specific values for the volume of coating solids deposited per volume of coating used, mass of VOC per volume of coating, volume fraction solids, transfer efficiency, density, and mass fraction VOC in Equations 4 through 6 of this section. Panel test results expressed in units of mass of VOC per volume of coating solids deposited must be converted to percent capture efficiency using Equation 4 of this section. (An alternative for using panel test results expressed in units of mass of VOC per mass of coating solids deposited is presented in paragraph (e)(3) of this section.)

$$CE_i = (P_{v,i})(V_{s,dep,i})(100)/(VOC_i) \qquad \text{(Eq. 4)}$$

Where:

CE_i = Capture efficiency for coating, i, or for the group of coatings, including coating, i, for the flash-off

area or bake oven for which the panel test is conducted, percent.

$P_{v,i}$ = Panel test result for coating, i, or for the coating representing coating, i, in the panel test, kg of VOC per liter of coating solids deposited.

$V_{sdep,i}$ = Volume of coating solids deposited per volume of coating used for coating, i, or composite volume of coating solids deposited per volume of coating used for the group of coatings including coating, i, in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, liter of coating solids deposited per liter of coating used, from Equation 5 of this section.

VOC_i = Mass of VOC per volume of coating for coating, i, or composite mass of VOC per volume of coating for the group of coatings including coating, i, kg per liter, from Equation 6 of this section.

(1) Calculate the volume of coating solids deposited per volume of coating used for coating, i, or the composite volume of coating solids deposited per volume of coating used for the group of coatings including coating, i, used during the month in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted using Equation 5 of this section:

$$V_{sdep,i} = \left(V_{s,i}\right)\left(TE_{c,i}\right) \qquad (Eq.\ 5)$$

Where:

$V_{sdep,\ i}$ = Volume of coating solids deposited per volume of coating used for coating, i, or composite volume of coating solids deposited per volume of coating used for the group of coatings including coating, i, in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, liter of coating solids deposited per liter of coating used.

$V_{s,\ i}$ = Volume fraction of coating solids for coating, i, or average volume fraction of coating solids for the group of coatings including coating, i, liter coating solids per liter coating, determined according to §63.3161(f).

$TE_{c,\ i}$ = Transfer efficiency of coating, i, or average transfer efficiency for the group of coatings including coating, i, in the spray booth(s) for the flash-off area or bake oven for which the panel test is conducted determined according to §63.3161(g), expressed as a decimal, for example 60 percent must be expressed as 0.60. (Transfer efficiency also may be determined by testing representative coatings. The same coating groupings may be appropriate for both transfer efficiency testing and panel testing. In this case, all of the coatings in a panel test grouping would have the same transfer efficiency.)

(2) Calculate the mass of VOC per volume of coating for coating, i, or the composite mass of VOC per volume of coating for the group of coatings including coating, i, used during the month in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, kg, using Equation 6 of this section:

$$VOC_i = \left(D_{c,i}\right)\left(Wvoc_{c,i}\right) \qquad (Eq\ 6)$$

Where:

VOC_i = Mass of VOC per volume of coating for coating, i, or composite mass of VOC per volume of coating for the group of coatings including coating, i, used during the month in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, kg VOC per liter coating.

$D_{c,i}$ = Density of coating, i, or average density of the group of coatings, including coating, i, kg coating per liter coating, density determined according to §63.3151(b).

$Wvoc_{c,i}$ = Mass fraction of VOC in coating, i, or average mass fraction of VOC for the group of coatings, including coating, i, kg VOC per kg coating, determined by Method 24 (appendix A to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in Section 9 of "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

(3) As an alternative, you may choose to express the results of your panel tests in units of mass of VOC per mass of coating solids deposited and convert such results to a percent using Equation 7 of this section. If you panel test representative coatings, then you may convert the panel test result for each representative coating either to a unique percent capture efficiency for each coating grouped with that representative coating by using coating specific values for the mass of coating solids deposited per mass of coating used, mass fraction VOC, transfer efficiency, and mass fraction solids in Equations 7 and 8 of this section; or to a composite percent capture efficiency for the group of coatings by using composite values for the group of coatings for the mass of coating solids deposited per mass of coating used and average values for the mass of VOC per volume of coating, average values for the group of coatings for mass fraction VOC, transfer efficiency, and mass fraction solids in Equations 7 and 8 of this section. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency for that coating by using coating specific values for the mass of coating solids deposited per mass of coating used, mass fraction VOC, transfer efficiency, and mass fraction solids in Equations 7 and 8 of this section. Panel test results expressed in units of mass of VOC per mass of coating solids deposited must be converted to percent capture efficiency using Equation 7 of this section:

$$CE_i = \left(P_{m,i}\right)\left(W_{sdep,i}\right)(100) / \left(Wvoc_{c,i}\right) \qquad \text{(Eq. 7)}$$

Where:

CE_i = Capture efficiency for coating, i, or for the group of coatings including coating, i, for the flash-off area or bake oven for which the panel test is conducted, percent.

$P_{m,i}$ = Panel test result for coating, i, or for the coating representing coating, i, in the panel test, kg of VOC per kg of coating solids deposited.

$W_{sdep,i}$ = Mass of coating solids deposited per mass of coating used for coating, i, or composite mass of coating solids deposited per mass of coating used for the group of coatings, including coating, i, in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, kg of solids deposited per kg of coating used, from Equation 8 of this section.

$Wvoc_{c,i}$ = Mass fraction of VOC in coating, i, or average mass fraction of VOC for the group of coatings, including coating, i, kg VOC per kg coating, determined by Method 24 (appendix A to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in Section 9 of "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

(4) Calculate the mass of coating solids deposited per mass of coating used for each coating or the composite mass of coating solids deposited per mass of coating used for each group of coatings used during the month in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted using Equation 8 of this section:

$$W_{sdep,i} = \left(W_{s,i}\right)\left(TE_{c,i}\right) \qquad \text{(Eq. 8)}$$

Where:

$W_{sdep,\ i}$ = Mass of coating solids deposited per mass of coating used for coating, i, or composite mass of coating solids deposited per mass of coating used for the group of coatings including coating, i, in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, kg coating solids deposited per kg coating used.

$W_{s,\ i}$ = Mass fraction of coating solids for coating, i, or average mass fraction of coating solids for the group of coatings including coating, i, kg coating solids per kg coating, determined by Method 24 (appendix A to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

$TE_{c,\ i}$ = Transfer efficiency of coating, i, or average transfer efficiency for the group of coatings including coating, i, in the spray booth(s) for the flash-off area or bake oven for which the panel test is conducted determined according to §63.3161(g), expressed as a decimal, for example 60 percent must be expressed as 0.60. (Transfer efficiency also may be determined by testing representative coatings. The same coating groupings may be appropriate used for both transfer efficiency testing and panel testing. In this case, all of the coatings in a panel test grouping would have the same transfer efficiency.)

(f) *Alternative capture efficiency procedure.* As an alternative to the procedures specified in paragraphs (c) through (e) and (g) of this section, you may determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the DQO or LCL approach as

described in appendix A to subpart KK of this part.

(g) *Panel testing to determine the capture efficiency of spray booth emissions from solvent-borne coatings.* You may conduct panel testing to determine the capture efficiency of spray booth emissions from solvent-borne coatings using the procedure in appendix A to this subpart.

[69 FR 22623, Apr. 26, 2004, as amended at 72 FR 20234, Apr. 24, 2007]

§63.3166 How do I determine the add-on control device emission destruction or removal efficiency?

You must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by §63.3160. You must conduct three test runs as specified in §63.7(e)(3), and each test run must last at least 1 hour.

(a) For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.

(1) Use Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight. The ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]" (incorporated by reference, see §63.14), may be used as an alternative to Method 3B.

(4) Use Method 4 of appendix A to 40 CFR part 60 to determine stack gas moisture.

(5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60, as specified in paragraphs (b)(1) through (3) of this section. You must use the same method for both the inlet and outlet measurements.

(1) Use Method 25 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million by volume (ppmv) at the control device outlet.

(2) Use Method 25A if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppmv or less at the control device outlet.

(3) Use Method 25A if the add-control device is not an oxidizer.

(c) If two or more add-on control devices are used for the same emission stream, then you must measure emissions at the outlet of each device. For example, if one add-on control device is a concentrator with an outlet for the high-volume, dilute stream that has been treated by the concentrator, and a second add-on control device is an oxidizer with an outlet for the low-volume, concentrated stream that is treated with the oxidizer, you must measure emissions at the outlet of the oxidizer and the high volume dilute stream outlet of the concentrator.

(d) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, you must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions.

$$M_f = Q_{sd} C_c (12)(0.0416)(10^{-6}) \qquad \text{(Eq. 1)}$$

Where:

M_f = Total gaseous organic emissions mass flow rate, kg per hour (kg/h).

C_c = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, ppmv, dry basis.

Q_{sd} = Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters per hour (dscm/h).

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m^3) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(e) For each test run, determine the add-on control device organic emissions destruction or removal efficiency using Equation 2 of this section:

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}}(100) \qquad \text{(Eq. 2)}$$

Where:

DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent.

M_{fi} = Total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h.

M_{fo} = Total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

(f) Determine the emission destruction or removal efficiency of the add-on control device as the average

of the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

§63.3167 How do I establish the add-on control device operating limits during the performance test?

During the performance test required by §63.3160 and described in §§63.3164 and 63.3166, you must establish the operating limits required by §63.3093 according to this section, unless you have received approval for alternative monitoring and operating limits under §63.8(f) as specified in §63.3093.

(a) *Thermal oxidizers.* If your add-on control device is a thermal oxidizer, establish the operating limit according to paragraphs (a)(1) through (3) of this section.

(1) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(2) Use all valid data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum 3-hour average operating limit for your thermal oxidizer.

(3) As an alternative, if the latest operating permit issued before April 26, 2007, for the thermal oxidizer at your facility contains recordkeeping and reporting requirements for the combustion temperature that are consistent with the requirements for thermal oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for the combustion temperature for each such thermal oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion temperature during the performance test of that thermal oxidizer. If you do not have an operating permit for the thermal oxidizer at your facility and the latest construction permit issued before April 26, 2007, for the thermal oxidizer at your facility contains recordkeeping and reporting requirements for the combustion temperature that are consistent with the requirements for thermal oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for the combustion temperature for each such thermal oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average combustion temperature during the performance test of that thermal oxidizer. If you use 28 degrees Celsius (50 degrees Fahrenheit) below the combustion temperature maintained during the performance test as the minimum operating limit for a thermal oxidizer, then you must keep the combustion temperature set point on that thermal oxidizer no lower than 14 degrees Celsius (25 degrees Fahrenheit) below the lower of that set point during the performance test for that thermal oxidizer and the average combustion temperature maintained during the performance test for that thermal oxidizer.

(b) *Catalytic oxidizers.* If your add-on control device is a catalytic oxidizer, establish the operating limits according to either paragraphs (b)(1) through (3) or paragraphs (b)(4) through (6) of this section.

(1) During the performance test, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each

of the three test runs.

(2) Use all valid data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. The minimum 3-hour average operating limits for your catalytic oxidizer are the average temperature just before the catalyst bed maintained during the performance test of that catalytic oxidizer and 80 percent of the average temperature difference across the catalyst bed maintained during the performance test of that catalytic oxidizer, except during periods of low production, the latter minimum operating limit is to maintain a positive temperature gradient across the catalyst bed. A low production period is when production is less than 80 percent of production rate during the performance test of that catalytic oxidizer.

(3) As an alternative, if the latest operating permit issued before April 26, 2007, for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limits for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer and 80 percent of the average temperature difference across the catalyst bed maintained during the performance test for that catalytic oxidizer, except during periods of low production the latter minimum operating limit is to maintain a positive temperature gradient across the catalyst bed. If you do not have an operating permit for the catalytic oxidizer at your facility and the latest construction permit issued before April 26, 2007, for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limits for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer and 80 percent of the average temperature difference across the catalyst bed maintained during the performance test for that catalytic oxidizer, except during periods of low production the latter minimum operating limit is to maintain a positive temperature gradient across the catalyst bed. A low production period is when production is less than 80 percent of production rate during the performance test. If you use 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test as the minimum operating limits for a catalytic oxidizer, then you must keep the set point for the temperature just before the catalyst bed on that catalytic oxidizer no lower than 14 degrees Celsius (25 degrees Fahrenheit) below the lower of that set point during the performance test for that catalytic oxidizer and the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer.

(4) As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(6) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least

once every 15 minutes during each of the three test runs. Use all valid data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

(5) If the latest operating permit issued before April 26, 2007, for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer. If you do not have an operating permit for the catalytic oxidizer at your facility and the latest construction permit issued before April 26, 2007, for the catalytic oxidizer at your facility contains recordkeeping and reporting requirements for the temperature before the catalyst bed that are consistent with the requirements for catalytic oxidizers in 40 CFR 60.395(c), then you may set the minimum operating limit for each such catalytic oxidizer at your affected source at 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer. If you use 28 degrees Celsius (50 degrees Fahrenheit) below the average temperature just before the catalyst bed maintained during the performance test as the minimum operating limit for a catalytic oxidizer, then you must keep the set point for the temperature just before the catalyst bed on that catalytic oxidizer no lower than 14 degrees Celsius (25 degrees Fahrenheit) below the lower of that set point during the performance test for that catalytic oxidizer and the average temperature just before the catalyst bed maintained during the performance test for that catalytic oxidizer.

(6) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (b)(4) or (b)(5) of this section. The plan must address, at a minimum, the elements specified in paragraphs (b)(6)(i) through (iii) of this section.

(i) Annual sampling and analysis of the catalyst activity (*i.e.*, conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures. If problems are found during the catalyst activity test, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.

(ii) Monthly external inspection of the catalytic oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.

(iii) Annual internal inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found during the annual internal inspection of the catalyst, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations. If the catalyst bed is replaced and is not of like or better kind and quality as the old catalyst, then you must conduct a new performance test to determine destruction efficiency according to §63.3166. If a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and you may continue to use the

previously established operating limits for that catalytic oxidizer.

(c) *Regenerative carbon adsorbers.* If your add-on control device is a regenerative carbon adsorber, establish the operating limits according to paragraphs (c)(1) and (2) of this section.

(1) You must monitor and record the total regeneration desorbing gas (*e.g.,* steam or nitrogen) mass flow for each regeneration cycle and the carbon bed temperature after each carbon bed regeneration and cooling cycle for the regeneration cycle either immediately preceding or immediately following the performance test.

(2) The operating limits for your carbon adsorber are the minimum total desorbing gas mass flow recorded during the regeneration cycle and the maximum carbon bed temperature recorded after the cooling cycle.

(d) *Condensers.* If your add-on control device is a condenser, establish the operating limits according to paragraphs (d)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the condenser outlet (product side) gas temperature at least once every 15 minutes during each of the three test runs.

(2) Use all valid data collected during the performance test to calculate and record the average condenser outlet (product side) gas temperature maintained during the performance test. This average condenser outlet gas temperature is the maximum 3-hour average operating limit for your condenser.

(e) *Concentrators.* If your add-on control device includes a concentrator, you must establish operating limits for the concentrator according to paragraphs (e)(1) and (2)of this section.

(1) During the performance test, you must monitor and record the desorption gas inlet temperature at least once every 15 minutes during each of the three runs of the performance test.

(2) Use all valid data collected during the performance test to calculate and record the average desorption gas inlet temperature. The minimum operating limit for the concentrator is 8 degrees Celsius (15 degrees Fahrenheit) below the average desorption gas inlet temperature maintained during the performance test for that concentrator. You must keep the set point for the desorption gas inlet temperature no lower than 6 degrees Celsius (10 degrees Fahrenheit) below the lower of that set point during the performance test for that concentrator and the average desorption gas inlet temperature maintained during the performance test for that concentrator.

(f) *Emission capture systems.* For each capture device that is not part of a PTE that meets the criteria of §63.3165(a) and that is not capturing emissions from a downdraft spray booth or from a flash-off area or bake oven associated with a downdraft spray booth, establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (f)(1) and (2) of this section. The operating limit for a PTE is specified in Table 1 to this subpart.

(1) During the capture efficiency determination required by §63.3160 and described in §§63.3164 and

63.3165, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

(2) Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device, using all valid data. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

[69 FR 22623, Apr. 26, 2004, as amended at 72 FR 20235, Apr. 24, 2007]

§63.3168 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

(a) *General.* You must install, operate, and maintain each CPMS specified in paragraphs (c), (e), (f), and (g) of this section according to paragraphs (a)(1) through (6) of this section. You must install, operate, and maintain each CPMS specified in paragraphs (b) and (d) of this section according to paragraphs (a)(3) through (5) of this section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally-spaced successive cycles of CPMS operation in 1 hour.

(2) You must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.

(3) You must record the results of each inspection, calibration, and validation check of the CPMS.

(4) You must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.

(5) You must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).

(6) You must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.

(7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out of control and data are not available for required calculations is a deviation from the monitoring requirements.

(b) *Capture system bypass line.* You must meet the requirements of paragraphs (b)(1) and (2) of this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

(1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (b)(1)(i) through (iv) of this section.

(i) *Flow control position indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.

(ii) *Car-seal or lock-and-key valve closures.* Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.

(iii) *Valve closure monitoring.* Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.

(iv) *Automatic shutdown system.* Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation.

(2) If any bypass line is opened, you must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in §63.3120.

(c) *Thermal oxidizers and catalytic oxidizers.* If you are using a thermal oxidizer or catalytic oxidizer as an add-on control device (including those used to treat desorbed concentrate streams from concentrators or carbon adsorbers), you must comply with the requirements in paragraphs (c)(1) through (3) of this section:

(1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.

(2) For a catalytic oxidizer, install a gas temperature monitor upstream of the catalyst bed. If you establish the operating parameters for a catalytic oxidizer under §63.3167(b)(1) through (3), you must also install a gas temperature monitor downstream of the catalyst bed. The temperature monitors must be in the gas stream immediately before and after the catalyst bed to measure the temperature difference across the bed. If you establish the operating parameters for a catalytic oxidizer under §63.3167(b)(4) through (6), you need not install a gas temperature monitor downstream of the catalyst bed.

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a)(1) through (6) and (c)(3)(i) through (vii) of this section for each gas temperature monitoring device.

(i) Locate the temperature sensor in a position that provides a representative temperature.

(ii) Use a temperature sensor with a measurement sensitivity of 4 degrees Fahrenheit or 0.75 percent of the temperature value, whichever is larger.

(iii) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(iv) If a gas temperature chart recorder is used, it must have a measurement sensitivity in the minor division of at least 20 degrees Fahrenheit.

(v) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30 degrees Fahrenheit of the process temperature sensor reading.

(vi) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(vii) At least monthly, inspect components for integrity and electrical connections for continuity, oxidation, and galvanic corrosion.

(d) *Regenerative carbon adsorbers.* If you are using a regenerative carbon adsorber as an add-on control device, you must monitor the total regeneration desorbing gas (*e.g.,* steam or nitrogen) mass flow for each regeneration cycle, the carbon bed temperature after each regeneration and cooling cycle, and comply with paragraphs (a)(3) through (5) and (d)(1) and (2) of this section.

(1) The regeneration desorbing gas mass flow monitor must be an integrating device having a measurement sensitivity of plus or minus 10 percent, capable of recording the total regeneration desorbing gas mass flow for each regeneration cycle.

(2) The carbon bed temperature monitor must have a measurement sensitivity of 1 percent of the temperature (as expressed in degrees Fahrenheit) recorded or 1 degree Fahrenheit, whichever is

greater, and must be capable of recording the temperature within 15 minutes of completing any carbon bed cooling cycle.

(e) *Condensers.* If you are using a condenser, you must monitor the condenser outlet (product side) gas temperature and comply with paragraphs (a)(1) through (6) and (e)(1) and (2) of this section.

(1) The gas temperature monitor must have a measurement sensitivity of 1 percent of the temperature (expressed in degrees Fahrenheit) recorded or 1 degree Fahrenheit, whichever is greater.

(2) The temperature monitor must provide a gas temperature record at least once every 15 minutes.

(f) *Concentrators.* If you are using a concentrator, such as a zeolite wheel or rotary carbon bed concentrator, you must install a temperature monitor in the desorption gas stream. The temperature monitor must meet the requirements in paragraphs (a)(1) through (6) and (c)(3) of this section.

(g) *Emission capture systems.* The capture system monitoring system must comply with the applicable requirements in paragraphs (g)(1) and (2) of this section.

(1) For each flow measurement device, you must meet the requirements in paragraphs (a)(1) through (6) and (g)(1)(i) through (iv) of this section.

(i) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.

(ii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(iii) Conduct a flow sensor calibration check at least semiannually.

(iv) At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.

(2) For each pressure drop measurement device, you must comply with the requirements in paragraphs (a)(1) through (6) and (g)(2)(i) through (vi) of this section.

(i) Locate the pressure tap(s) in a position that provides a representative measurement of the pressure drop across each opening you are monitoring.

(ii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(iii) Check pressure tap pluggage daily.

(iv) Using an inclined manometer with a measurement sensitivity of 0.0002 inch water, check gauge calibration quarterly and transducer calibration monthly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum

operating pressure range or install a new pressure sensor.

(vi) At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.

§63.3169 What are the requirements for a capture system or add-on control device which is not taken into account when demonstrating compliance with the applicable emission limitations?

You may have capture systems or add-on control devices which you choose not to take into account when demonstrating compliance with the applicable emission limitations. For any such capture system or add-on control device, you are not required to comply with the requirements of §§63.3093, 63.3100, 63.3110, 63.3120, 63.3130, 63.3131, and 63.3160 through 63.3168 with regard to notification, reporting, recordkeeping, performance tests, monitoring, operating parameters, capture efficiency, add-on control device efficiency, destruction efficiency, or removal efficiency. If, at a later date, you decide to take any such capture system or add-on control device into account when demonstrating compliance with the emission limitations, then at that time you must comply with the requirements of §§63.3093, 63.3100, 63.3110, 63.3120, 63.3130, 63.3131, and 63.3160 through 63.3168 with regard to notification, recordkeeping, performance tests, monitoring, operating parameters, capture efficiency, add-on control device efficiency, destruction efficiency, and removal efficiency, as applicable, for that capture system or add-on control device.

[72 FR 20235, Apr. 24, 2007]

Compliance Requirements for the Combined Primer-Surfacer, Topcoat, Final Repair, Glass Bonding Primer, and Glass Bonding Adhesive Emission Limitations and the Separate Electrodeposition Primer Emission Limitations

§63.3170 By what date must I conduct performance tests and other initial compliance demonstrations?

(a) *New and reconstructed affected sources.* For a new or reconstructed affected source, you must meet the requirements of paragraphs (a)(1) through (4) of §63.3160.

(b) *Existing affected sources.* For an existing affected source, you must meet the requirements of paragraphs (b)(1) through (3) of §63.3160.

§63.3171 How do I demonstrate initial compliance?

(a) You must meet all of the requirements of this section to demonstrate initial compliance. To demonstrate initial compliance, the organic HAP emissions from the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) must meet the applicable emission limitation in §63.3090(b) or §63.3091(b); and the organic HAP emissions

from the electrodeposition primer operation must meet the applicable emissions limitations in §63.3092(a) or (b).

(b) *Compliance with operating limits.* Except as provided in §63.3160(a)(4), you must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by §63.3093, using the procedures specified in §§63.3167 and 63.3168.

(c) *Compliance with work practice requirements.* You must develop, implement, and document your implementation of the work practice plans required by §63.3094(b) and (c) during the initial compliance period, as specified in §63.3130.

(d) *Compliance with emission limits.* You must follow the procedures in §63.3161(e) through (n), excluding materials used in electrodeposition primer operations, to demonstrate compliance with the applicable emission limit in §63.3090(b) or §63.3091(b). You must follow the procedures in paragraph (e) of this section to demonstrate compliance with the emission limit in §63.3092(a), or paragraphs (f) through (g) of this section to demonstrate compliance with the emission limitations in §63.3092(b).

(e) *Determine the mass fraction of each organic HAP in each material used in the electrodeposition primer operation.* You must determine the mass fraction of each organic HAP for each material used in the electrodeposition primer operation during the compliance period by using one of the options in paragraphs (e)(1) through (3) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of each organic HAP.

(2) *Alternative method.* You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(3) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (e)(1) and (2) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4), and at 1.0 percent by mass or more for other compounds. If there is a disagreement between such information and results of a test conducted according to paragraph (e)(1) or (2) of this section, then the test method results will take precedence unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(f) *Capture of electrodeposition bake oven emissions.* You must show that the electrodeposition bake oven meets the criteria in sections 5.3 through 5.5 of Method 204 of appendix M to 40 CFR part 51 and directs all of the exhaust gases from the bake oven to an add-on control device. For purposes of this showing, an electrodeposition bake oven air seal is not considered a natural draft opening provided you demonstrate that the direction of air movement across the interface between the bake oven air seal and the bake oven is into the bake oven. You may use lightweight strips of fabric or paper, or smoke tubes to

make such demonstrations. You cannot count air flowing from an electrodeposition bake oven air seal into an electrodeposition bake oven as air flowing through a natural draft opening unless you elect to treat that electrodeposition bake oven air seal as a natural draft opening.

(g) *Control of electrodeposition bake oven emissions.* Determine the efficiency of each control device on each electrodeposition bake oven using the procedures in §§63.3164 and 63.3166.

(h) *Compliance demonstration.* To demonstrate initial compliance, the organic HAP emissions from the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) must meet the applicable emission limitation in §63.3090(b) or §63.3091(b); the organic HAP emissions from the electrodeposition primer operation must meet the applicable emissions limitations in §63.3092(a) or (b). You must keep all records as required by §§63.3130 and 63.3131. As part of the Notification of Compliance Status required by §63.3110, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate from the combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) was less than or equal to the applicable emission limit in §63.3090(b) or §63.3091(b), and the organic HAP emissions from the electrodeposition primer operation met the applicable emissions limitations in §63.3092(a) or (b), and you achieved the operating limits required by §63.3093 and the work practice standards required by §63.3094.

[69 FR 22623, Apr. 26, 2004, as amended at 72 FR 20235, Apr. 24, 2007]

§63.3172 [Reserved]

§63.3173 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance with the applicable emission limit in §63.3090(b) or §63.3091(b), the organic HAP emission rate for each compliance period determined according to the procedures in §63.3171 must be equal to or less than the applicable emission limit in §63.3090(b) or §63.3091(b). A compliance period consists of 1 month. Each month after the end of the initial compliance period described in §63.3170 is a compliance period consisting of that month. You must perform the calculations in §63.3171 on a monthly basis.

(b) If the organic HAP emission rate for any 1 month compliance period exceeded the applicable emission limit in §63.3090(b) or §63.3091(b), this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.3110(c)(6) and 63.3120(a)(6).

(c) You must meet the requirements of §63.3163(c) through (j).

§63.3174 What are the requirements for a capture system or add-on control device which is not taken into account when demonstrating compliance with the applicable emission limitations?

You may have capture systems or add-on control devices which you choose not to take into account when demonstrating compliance with the applicable emission limitations. For any such capture system or add-on control device, you are not required to comply with the requirements of §§63.3093, 63.3100, 63.3110, 63.3120, 63.3130, 63.3131, and 63.3160 through 63.3168 with regard to notification, reporting, recordkeeping, performance tests, monitoring, operating parameters, capture efficiency, add-on control device efficiency, destruction efficiency, or removal efficiency. If, at a later date, you decide to take any such capture system or add-on control device into account when demonstrating compliance with the emission limitations, then at that time you must comply with the requirements of §§63.3093, 63.3100, 63.3110, 63.3120, 63.3130, 63.3131, and 63.3160 through 63.3168 with regard to notification, reporting, recordkeeping, performance tests, monitoring, operating parameters, capture efficiency, add-on control device efficiency, destruction efficiency, and removal efficiency, as applicable, for that capture system or add-on control device.

[72 FR 20236, Apr. 24, 2007]

Other Requirements and Information

§63.3175 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, EPA, or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:

(1) Approval of alternatives to the work practice standards in §63.3094 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.3176 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in the General Provisions of this part, and in this section as follows:

Add-on control device means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

Add-on control device efficiency means the ratio of the emissions collected or destroyed by an add-on air pollution control device to the total emissions that are introduced into the control device, expressed as a percentage.

Adhesive means any chemical substance that is applied for the purpose of bonding two surfaces together.

Adhesive and sealer material means adhesives, sealers and thinners added to adhesives or sealers.

Anti-chip coating means a specialty type of coating designed to reduce stone chipping damage. Anti-chip coating may be applied to broad areas of the vehicle or to selected vehicle surfaces that are most vulnerable to impingement by stones and other road debris. Anti-chip coating is typically applied after the *electrodeposition primer* and before the *topcoat.* Anti-chip coating is a type of *primer-surfacer.*

Automobile means a motor vehicle designed to carry up to eight passengers, excluding vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property. See also *Light-duty truck.*

Automobile and light-duty truck assembly plant means a facility which assembles automobiles or light-duty trucks, including coating facilities and processes.

Bake oven air seal means an entry or entry vestibule to or an exit or exit vestibule from a bake oven which isolates the bake oven from the area immediately preceding (for an entry or entry vestibule) or immediately following (for an exit or exit vestibule) the bake oven. No significant VOC generating activity takes place in a bake oven air seal. Fresh air is supplied into a bake oven air seal and is then directed in part into the bake oven and in part into the area immediately preceding or immediately following the bake oven. All types of bake ovens, including ovens associated with spray booths and electrodeposition primer bake ovens, may have bake oven air seals.

Basecoat/clearcoat means a topcoat system applied to exterior and selected interior vehicle surfaces primarily to provide an aesthetically pleasing appearance and acceptable durability performance. It consists of a layer of pigmented basecoat color coating, followed directly by a layer of a clear or semitransparent coating. It may include multiple layers of color coats or tinted clear materials.

Blackout coating means a type of specialty coating applied on selected vehicle surfaces (including areas of the engine compartment visible through the grill, and window and pillar trim) to provide a cosmetic appearance. Typically black or dark gray color. Blackout coating may be included in either the primer-

surfacer or topcoat operations.

Body part means exterior parts such as hoods, fenders, doors, roof, quarter panels, decklids, tail gates, and cargo beds. Body parts were traditionally made of sheet metal, but now are also made of plastic. Bumpers, fascia, and cladding are not body parts.

Capture device means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

Capture efficiency or capture system efficiency means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

Capture system means one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings, both at the point of application and at subsequent points where emissions from the coatings occur, such as flash-off, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

Catalytic oxidizer means a device for oxidizing pollutants or waste materials via flame and heat incorporating a catalyst to aid the combustion at lower operating temperature.

Chip resistant edge primer means an *anti-chip coating* applied to the leading edge of parts such as the hood or roof.

Cleaning material means a solvent used to remove contaminants and other materials such as dirt, grease, oil, and dried (*e.g.,* depainting) or wet coating from a substrate before or after coating application; or from equipment associated with a coating operation, such as spray booths, spray guns, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

Coating means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, caulks, inks, adhesives, primers, deadeners, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances are not considered coatings for the purposes of this subpart.

Coating operation means equipment used to apply coating to a substrate (coating application) and to dry or cure the coating after application. A single coating operation always includes at least the point at which a coating is applied and all subsequent points in the affected source where organic HAP emissions from that coating occur. There may be multiple coating operations in an affected source. Coating application with hand-held nonrefillable aerosol containers, touchup bottles, touchup markers, marking pens, or pinstriping equipment is not a coating operation for the purposes of this subpart. The application of temporary materials such as protective oils and “travel waxes” that are designed to be removed from the vehicle before it is delivered to a retail purchaser is not a coating operation for the purposes of this subpart.

Coating solids means the nonvolatile portion of the coating.

Container means a receptacle, such as a can, vessel, tote, or tank, in which coatings, solvents or cleaning materials are held, stored, mixed, or carried.

Continuous parameter monitoring system (CPMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart; used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

Controlled coating operation means a *coating operation* from which some or all of the organic HAP emissions are routed through a *capture system* and an *add-on control device* which are taken into account when demonstrating compliance with an emission limitation in this subpart.

Day tank means tank with agitation and pumping system used for mixing and continuous circulation of coatings from the paint storage area to the spray booth area of the paint shop.

Deadener means a specialty coating applied to selected vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

Deadener material means deadener and thinner added to deadener.

Deposited solids means the coating solids which remain on the substrate or object being painted.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or fails to meet any emission limit or operating limit or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart. A deviation is not always a violation.

Electrodeposition primer or electrocoating primer means a process of applying a protective, corrosion-resistant waterborne primer on exterior and interior surfaces that provides thorough coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank. Also referred to as E-Coat, Uni-Prime, and ELPO Primer.

Emission limitation means an emission limit, operating limit, or work practice standard.

Final repair means the operations performed and coating(s) applied to completely-assembled motor vehicles or to parts that are not yet on a completely assembled motor vehicle to correct damage or imperfections in the coating. The curing of the coatings applied in these operations is accomplished at a lower temperature than that used for curing primer-surfacer and topcoat. This lower temperature cure

avoids the need to send parts that are not yet on a completely assembled vehicle through the same type of curing process used for primer-surfacer and topcoat and is necessary to protect heat sensitive components on completely assembled motor vehicles.

Flash-off area means the portion of a coating process between the coating application station and the next coating application station or drying oven where solvent begins to evaporate from the coated vehicle.

Glass bonding adhesive means an adhesive used to bond windshield or other glass to an automobile or light-duty truck body.

Glass bonding primer means a primer applied to windshield or other glass, or to body openings to prepare the glass or body openings for the application of glass bonding adhesive, or the installation of adhesive bonded glass.

Guide coat means *Primer-surfacer.*

In-line repair means the operation performed and coating(s) applied to correct damage or imperfections in the topcoat on parts that are not yet on a completely assembled motor vehicle. The curing of the coatingspplied in these operations is accomplished at essentially the same temperature as that used for curing the previously applied topcoat. Also referred to as high bake repair or high bake reprocess. In-line repair is considered part of the topcoat operation.

Light-duty truck means vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property with gross vehicle weight rating of 8,500 lbs or less.

Lower body anti-chip coating means an *anti-chip coating* applied to lower body surfaces such as rocker panels, valence panels, lower portions of doors, or lower portions of fenders.

Manufacturer's formulation data means data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in §§63.3151 and 63.3161. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

Mass fraction of organic HAP means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

Month means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

Organic HAP content means the mass of organic HAP per mass of coating material.

Other motor vehicle means a self-propelled vehicle designed for transporting persons or property on a street or highway that has a gross vehicle weight rating over 8,500 pounds. You may choose to make the

coating of other motor vehicles subject to this subpart pursuant to §63.3082(c).

Other motor vehicle assembly plant means a facility which assembles other motor vehicles, including coating facilities and processes.

Paint line means a set of coating operations which includes a topcoat operation and, if present, includes electrodeposition primer, primer-surfacer, final repair, glass bonding primer and glass bonding adhesive operations in which the same new automobile or new light-duty truck bodies, or body parts for new automobiles, or new light-duty trucks are coated. The most typical paint line consists of a set of electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations in which the same new automobile or new light-duty truck bodies are coated.

Paint shop means the collection of all areas at the facility in which new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks are phosphated and coated (including application, flash-off, drying and curing of electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, glass bonding adhesive, deadener, adhesives and sealers); all coating operations added to the affected source pursuant to §63.3082(c); all areas at the facility in which substrates or equipment are cleaned relating to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobiles or new light-duty trucks, or coating operations added to the affected source pursuant to §63.3082(c); and all areas at the facility used for storage, mixing, conveying and waste handling of coatings, thinners and cleaning materials related to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobiles or new light-duty trucks, or coating operations added to the affected source pursuant to §63.3082(c). If there is no application of topcoat to new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks at the facility, then for purposes of this subpart the facility does not have a paint shop.

Permanent total enclosure (PTE) means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

Plastic or composites molding facility means a facility where the purchase cost of capital equipment used for plastic or composites molding, including presses, tooling, and associated material processing and handling equipment, is greater than the purchase cost of capital equipment used for the surface coating of new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks.

Primer-surfacer means an intermediate protective coating applied on the *electrodeposition primer* and under the *topcoat.* Primer-surfacer provides adhesion, protection, and appearance properties to the total finish. Primer-surfacer may also be called *guide coat* or *surfacer. Anti-chip coating* is a type of primer-surfacer.

Purge/clean operation means the process of flushing paint out and cleaning the spray lines when

changing colors or to remove undesired material. It includes use of air and solvents to clean the lines.

Purge capture means the capture of purge solvent and materials into a closed collection system immediately after purging the system. It is used to prevent the release of organic HAP emissions and includes the disposal of the captured purge material.

Purge material means the coating and associated cleaning solvent materials expelled from the spray system during the process of cleaning the spray lines and applicators when color-changing or to maintain the cleanliness of the spray system.

Protective oil means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Research or laboratory operations means surface coating for which the primary purpose is research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and that is not part of the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

Responsible official means responsible official as defined in 40 CFR 70.2.

Sealer means a high solids, high viscosity material, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating. The primary purpose of sealers is to fill body joints completely so that there is no intrusion of water, gases or corrosive materials into the passenger area of the body compartment. Also referred to as sealants.

Spray booth means a ventilated structure housing automatic and/or manual spray application equipment for coating operations. Includes facilities for the capture and entrapment of particulate overspray.

Spray booth air seal means an entry or entry vestibule to or exit or exit vestibule from a spray booth which isolates the spray booth from the area immediately preceding (for an entry or entry vestibule) or immediately following (for an exit or exit vestibule) the spray booth. No coating application or other VOC generating activity takes place in a spray booth air seal. Fresh air is supplied into a spray booth air seal and is then directed in part into the spray booth and in part into the area immediately preceding or immediately following the spray booth.

Startup, initial means the first time equipment is used in a facility to produce a salable product.

Surface preparation means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called “depainting.”

Surfacer means *Primer-surfacer.*

Tack-wipe means solvent impregnated cloth used to remove dust from surfaces prior to application of coatings.

Temporary total enclosure means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.

Thermal oxidizer means a device for oxidizing air pollutants or waste materials via flame and heat.

Thinner means an organic solvent that is added to a coating after the coating is received from the supplier.

Topcoat means the final coating system applied to provide the final color and/or a protective finish. The topcoat may be a monocoat color or basecoat/clearcoat system. In-line repair and two-tone are part of topcoat.

Total volatile hydrocarbon (TVH) means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

Touchup bottle means a coating container with a volume of 0.25 liter or less used with a brush or other non-atomizing applicator.

Transfer efficiency means the ratio of the amount of coating solids deposited onto the surface of the object to the total amount of coating solids sprayed while applying the coating to the object.

Uncontrolled coating operation means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

Underbody anti-chip coating means an *anti-chip coating* applied to the underbody or wheel wells primarily for the purpose of protecting these areas of the vehicle from stone chipping.

Volatile organic compound (VOC) means any compound defined as VOC in 40 CFR 51.100(s).

Volume fraction of coating solids means the ratio of the volume of coating solids (also known as volume of nonvolatiles) to the volume of coating; liters of coating solids per liter of coating.

[69 FR 22623, Apr. 26, 2004, as amended at 71 FR 76927, Dec. 22, 2006; 72 FR 20236, Apr. 24, 2007]

Table 1 to Subpart IIII of Part 63—Operating Limits for Capture Systems and Add-On Control Devices

If you are required to comply with operating limits by §63.3093, you must comply with the applicable operating limits in the following table

For the following device ...	You must meet the following operating limit ...	And you must demonstrate continuous compliance with the operating limit by
1. Thermal oxidizer	a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.3167(a)	i. Collecting the combustion temperature data according to §63.3168(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above temperature limit.
2. Catalytic oxidizer	a. The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to §63.3167(b); and either	i. Collecting the temperature data temperature according to §63.3168(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature before the catalyst bed at or above the temperature limit.
	b. Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to §63.3167(b)(2); or	i. Collecting the temperature data according to §63.3168(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature difference at or above the temperature difference limit; or
	c. Develop and implement an inspection and maintenance plan according to §63.3167(b)(4)	i. Maintaining an up-to-date inspection maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by §63.3167(b)(4), you must take corrective action as soon as practicable consistent with the manufacturer's recommendations.

3. Regenerative carbon adsorber	a. The total regeneration desorbing gas (*e.g.,* steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to §63.3167(c)	i. Measuring the total regeneration desorbing gas (*e.g.,* steam or nitrogen) mass flow for each regeneration cycle according to §63.3168(d); and ii. Maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit.
	b. The temperature of the carbon bed after completing each regeneration and any cooling cycle must not exceed the carbon bed temperature limit established according to §63.3167(c)	i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to §63.3168(d); and ii. Operating the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit.
4. Condenser	a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to §63.3167(d)	i. Collecting the condenser outlet (product side) gas temperature according to §63.3168(e); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average gas temperature at the outlet at or below the temperature limit.
5. Concentrators, including zeolite wheels and rotary carbon adsorbers	a. The average desorption gas inlet temperature in any 3-hour period must not fall below the limit established according to §63.3167(e)	i. Collecting the temperature data according to §63.3168(f); ii. Reducing the data to 3-hour block averages; and iii. maintaining the 3-hour average temperature at or above the temperature limit.
6. Emission capture system that is a PTE	a. The direction of the air flow at all times must be into the enclosure; and either b. The average facial velocity of air	i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to §63.3168(g)(1) or the pressure drop across

	through all natural draft openings in the enclosure must be at least 200 feet per minute; or c. The pressure drop across the enclosure must be at least 0.007 inch water, as established in Method 204 of appendix M to 40 CFR part 51	the enclosure according to §63.3168(g)(2); and ii. Maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.
7. Emission capture system that is not a PTE	a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to §63.3167(f). This applies only to capture devices that are not part of a PTE that meets the criteria of §63.3165(a) and that are not capturing emissions from a downdraft spray booth or from a flashoff area or bake oven associated with a downdraft spray booth	i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to §63.3168(g); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit.

[69 FR 22623, Apr. 26, 2004, as amended at 72 FR 20236, Apr. 24, 2007]

Table 2 to Subpart IIII of Part 63—Applicability of General Provisions to Subpart IIII of Part 63

You must comply with the applicable General Provisions requirements according to the following table

Citation	**Subject**	**Applicable to subpart IIII**	**Explanation**
§63.1(a)(1)-(12)	General Applicability	Yes	
§63.1(b)(1)-(3)	Initial Applicability Determination	Yes	Applicability to subpart IIII is also specified in §63.3081.

§63.1(c)(1)	Applicability After Standard Established	Yes	
§63.1(c)(2)	Applicability of Permit Program for Area Sources	No	Area sources are not subject to subpart IIII.
§63.1(c)(5)	Extensions and Notifications	Yes	
§63.1(e)	Applicability of Permit Program Before Relevant Standard is Set	Yes	
§63.2	Definitions	Yes	Additional definitions are specified in §63.3176.
§63.3(a)-(c)	Units and Abbreviations	Yes	
§63.4(a)(1)-(5)	Prohibited Activities	Yes	
§63.4(b)-(c)	Circumvention/Fragmentation	Yes	
§63.5(a)	Preconstruction Review Applicability	Yes	
§63.5(b)(1)-(6)	Requirements for Existing, Newly Constructed, and Reconstructed Sources	Yes	
§63.5(d)	Application for Approval of Construction/Reconstruction	Yes	
§63.5(e)	Approval of Construction/Reconstruction	Yes	
§63.5(f)	Approval of Construction/Reconstruction Based on Prior State Review	Yes	
§63.6(a)	Compliance With Standards and Maintenance Requirements—	Yes	

	Applicability		
§63.6(b)(1)-(7)	Compliance Dates for New and Reconstructed Sources	Yes	Section 63.3083 specifies the compliance dates.
§63.6(c)(1)-(5)	Compliance Dates for Existing Sources	Yes	Section 63.3083 specifies the compliance dates.
§63.6(e)(1)-(2)	Operation and Maintenance	Yes	
§63.6(e)(3)	SSMP	Yes	Only sources using an add-on control device to comply with the standard must complete SSMP.
§63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes	Applies only to sources using an add-on control device to comply with the standards.
§63.6(f)(2)-(3)	Methods for Determining Compliance	Yes.	
§63.6(g)(1)-(3)	Use of an Alternative Standard	Yes.	
§63.6(h)	Compliance With Opacity/Visible Emission Standards	No	Subpart IIII does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§63.6(i)	Extension of Compliance	Yes.	
63.6(j)	Presidential Compliance Exemption	Yes.	
§63.7(a)(1)	Performance Test Requirements—Applicability	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§63.3164 and 63.3166.
§63.7(a)(2)	Performance Test Requirements—Dates	Yes	Applies only to performance tests for capture system and control

			device efficiency at sources using these to comply with the standards. Section 63.3160 specifies the schedule for performance test requirements that are earlier than those specified in §63.7(a)(2).
§63.7(a)(3)	Performance Tests Required By the Administrator	Yes.	
§63.7(b)-(e)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing Conditions During Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§63.7(f)	Performance Test Requirements—Use of Alternative Test Method	Yes	Applies to all test methods except those used to determine capture system efficiency.
§63.7(g)-(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards.
§63.8(a)(1)-(3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for monitoring are specified in §63.3168.
§63.8(a)(4)	Additional Monitoring Requirements	No	Subpart IIII does not have monitoring requirements for flares.
§63.8(b)	Conduct of Monitoring	Yes	

63.8(c)(1)-(3)	Continuous Monitoring Systems (CMS) Operation and Maintenance	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for CMS operations and maintenance are specified in §63.3168.
§63.8(c)(4)	CMS	No	Section 63.3168 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply with the standards.
§63.89(c)(5)	COMS	No	Subpart IIII does not have opacity or visible emission standards.
§63.8(c)(6)	CMS Requirements	No	Section 63.3168 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply with the standards.
§63.8(c)(7)	CMS Out-of-Control Periods	No	
§63.8(c)(8)	CMS Out-of-Control Periods Reporting	No	Section 63.3120 requires reporting of CMS out-of-control periods.
§63.8(d)-(e)	Quality Control Program and CMS Performance Evaluation	No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§63.8(f)(1)-(5)	Use of an Alternative Monitoring Method	Yes.	
§63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart IIII does not require the use of continuous emissions monitoring

			systems.
§63.8(g)(1)-(5)	Data Reduction	No	Sections 63.3167 and 63.3168 specify monitoring data reduction.
§63.9(a)-(d)	Notification Requirements	Yes.	
§63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standards.
§63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart IIII does not have opacity or visible emission standards.
§63.9(g)(1)-(3)	Additional Notifications When Using CMS	No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§63.9(h)	Notification of Compliance Status	Yes	Section 63.3110 specifies the dates for submitting the notification of compliance status.
§63.9(i)	Adjustment of Submittal Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes.	
§63.10(a)	Recordkeeping/Reporting—Applicability and General Information	Yes.	
§63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§63.3130 and 63.3131.
§63.10(b)(2)(i)-(v)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS	Yes	Requirements for startup, shutdown, and malfunction records only apply to capture systems and add-on control devices used to comply with the standards.

§63.10(b)(2)(vi)-(xi)		Yes.	
§63.10(b)(2)(xii)	Records	Yes.	
§63.10(b)(2)(xiii)		No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§63.10(b)(2)(xiv)		Yes.	
§63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes.	
§63.10(c)(1)-(6)	Additional Recordkeeping Requirements for Sources with CMS	Yes.	
§63.10(c)(7)-(8)		No	The same records are required in §63.3120(a)(6).
§63.10(c)(9)-(15)		Yes	
§63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in §63.3120.
§63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in §63.3120(b).
§63.10(d)(3)	Reporting Opacity or Visible Emissions Observations	No	Subpart IIII does not require opacity or visible emissions observations.
§63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	Yes.	
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	Yes	Applies only to capture systems and add-on control devices used to comply with the standards.

§63.10(e)(1)-(2)	Additional CMS Reports	No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	Section 63.3120(b) specifies the contents of periodic compliance reports.
§63.10(e)(4)	COMS Data Reports	No	Subpart IIII does not specify requirements for opacity or COMS.
§63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§63.11	Control Device Requirements/Flares	No	Subpart IIII does not specify use of flares for compliance.
§63.12	State Authority and Delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by Reference	Yes.	
§63.15	Availability of Information/Confidentiality	Yes.	

Table 3 to Subpart IIII of Part 63—Default Organic HAP Mass Fraction for Solvents and Solvent Blends

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data

Solvent/solvent blend	**CAS. No.**	**Average organic HAP mass fraction**	**Typical organic HAP, percent by mass**
1. Toluene	108-88-3	1.0	Toluene.
2. Xylene(s)	1330-20-7	1.0	Xylenes, ethylbenzene.

3. Hexane	110-54-3	0.5	n-hexane.
4. n-Hexane	110-54-3	1.0	n-hexane.
5. Ethylbenzene	100-41-4	1.0	Ethylbenzene.
6. Aliphatic 140		0	None.
7. Aromatic 100		0.02	1% xylene, 1% cumene.
8. Aromatic 150		0.09	Naphthalene.
9. Aromatic naphtha	64742-95-6	0.02	1% xylene, 1% cumene.
10. Aromatic solvent	64742-94-5	0.1	Naphthalene.
11. Exempt mineral spirits	8032-32-4	0	None.
12. Ligroines (VM & P)	8032-32-4	0	None.
13. Lactol spirits	64742-89-6	0.15	Toluene.
14. Low aromatic white spirit	64742-82-1	0	None.
15. Mineral spirits	64742-88-7	0.01	Xylenes.
16. Hydrotreated naphtha	64742-48-9	0	None.
17. Hydrotreated light distillate	64742-47-8	0.001	Toluene.
18. Stoddard solvent	8052-41-3	0.01	Xylenes.
19. Super high-flash naphtha	64742-95-6	0.05	Xylenes.
20. Varsol® solvent	8052-49-3	0.01	0.5% xylenes, 0.5% ethylbenzene.
21. VM & P naphtha	64742-89-8	0.06	3% toluene, 3% xylene.

22. Petroleum distillate mixture	68477-31-6	0.08	4% naphthalene, 4% biphenyl.

Table 4 to Subpart IIII of Part 63—Default Organic HAP Mass Fraction for Petroleum Solvent Groups[a]

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data

Solvent type	Average organic HAP mass fraction	Typical organic HAP, percent by mass
Aliphatic[b]	0.03	1% Xylene, 1% Toluene, and 1% Ethylbenzene.
Aromatic[c]	0.06	4% Xylene, 1% Toluene, and 1% Ethylbenzene.

[a]Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart, and you only know whether the blend is aliphatic or aromatic.

[b]*E.g.*, Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

[c]*E.g.*, Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

Appendix A to Subpart IIII of Part 63—Determination of Capture Efficiency of Automobile and Light-Duty Truck Spray Booth Emissions From Solvent-borne Coatings Using Panel Testing

1.0 Applicability, Principle, and Summary of Procedure.

1.1 Applicability.

This procedure applies to the determination of capture efficiency of automobile and light-duty truck spray booth emissions from solvent-borne coatings using panel testing. This procedure can be used to determine capture efficiency for partially controlled spray booths (*e.g.,* automated spray zones controlled and manual spray zones not controlled) and for fully controlled spray booths.

1.2 Principle.

1.2.1 The volatile organic compounds (VOC) associated with the coating solids deposited on a part (or panel) in a controlled spray booth zone (or group of contiguous controlled spray booth zones) partition themselves between the VOC that volatilize in the controlled spray booth zone (principally between the spray gun and the part) and the VOC that remain on the part (or panel) when the part (or panel) leaves the controlled spray booth zone. For solvent-borne coatings essentially all of the VOC associated with the coating solids deposited on a part (or panel) in a controlled spray booth zone that volatilize in the controlled spray booth zone pass through the waterwash and are exhausted from the controlled spray booth zone to the control device.

1.2.2 The VOC associated with the overspray coating solids in a controlled spray booth zone partition themselves between the VOC that volatilize in the controlled spray booth zone and the VOC that are still tied to the overspray coating solids when the overspray coating solids hit the waterwash. For solvent-borne coatings almost all of the VOC associated with the overspray coating solids that volatilize in the controlled spray booth zone pass through the waterwash and are exhausted from the controlled spray booth zone to the control device. The exact fate of the VOC still tied to the overspray coating solids when the overspray coating solids hit the waterwash is unknown. This procedure assumes that none of the VOC still tied to the overspray coating solids when the overspray coating solids hit the waterwash are captured and delivered to the control device. Much of this VOC may become entrained in the water along with the overspray coating solids. Most of the VOC that become entrained in the water along with the overspray coating solids leave the water, but the point at which this VOC leave the water is unknown. Some of the VOC still tied to the overspray coating solids when the overspray coating solids hit the waterwash may pass through the waterwash and be exhausted from the controlled spray booth zone to the control device.

1.2.3 This procedure assumes that the portion of the VOC associated with the overspray coating solids in a controlled spray booth zone that volatilizes in the controlled spray booth zone, passes through the waterwash and is exhausted from the controlled spray booth zone to the control device is equal to the portion of the VOC associated with the coating solids deposited on a part (or panel) in that controlled spray booth zone that volatilizes in the controlled spray booth zone, passes through the waterwash, and is exhausted from the controlled spray booth zone to the control device. This assumption is equivalent to treating all of the coating solids sprayed in the controlled spray booth zone as if they are deposited coating solids (*i.e.,* assuming 100 percent transfer efficiency) for purposes of using a panel test to determine spray booth capture efficiency.

1.2.4 This is a conservative (low) assumption for the portion of the VOC associated with the overspray coating solids in a controlled spray booth zone that volatilizes in the controlled spray booth zone. Thus, this assumption results in an underestimate of conservative capture efficiency. The overspray coating solids have more travel time and distance from the spray gun to the waterwash than the deposited coating solids have between the spray gun and the part (or panel). Therefore, the portion of the VOC associated with the overspray coating solids in a controlled spray booth zone that volatilizes in the

controlled spray booth zone should be greater than the portion of the VOC associated with the coating solids deposited on a part (or panel) in that controlled spray booth zone that volatilizes in that controlled spray booth zone.

1.3 Summary of Procedure.

1.3.1 A panel test is performed to determine the mass of VOC that remains on the panel when the panel leaves a controlled spray booth zone. The total mass of VOC associated with the coating solids deposited on the panel is calculated.

1.3.2 The percent of the total VOC associated with the coating solids deposited on the panel in the controlled spray booth zone that remains on the panel when the panel leaves the controlled section of the spray booth is then calculated from the ratio of the two previously determined masses. The percent of the total VOC associated with the coating solids deposited on the panel in the controlled spray booth zone that is captured and delivered to the control device equals 100 minus this percentage. (The mass of VOC associated with the coating solids deposited on the panel which is volatilized and captured in the controlled spray booth zone equals the difference between the total mass of VOC associated with the coating solids deposited on the panel and the mass of VOC remaining with the coating solids deposited on the panel when the panel leaves the controlled spray booth zone.)

1.3.3 The percent of the total VOC associated with the coating sprayed in the controlled spray booth zone that is captured and delivered to the control device is assumed to be equal to the percent of the total VOC associated with the coating solids deposited on the panel in the controlled spray booth zone that is captured and delivered to the control device. The percent of the total VOC associated with the coating sprayed in the entire spray booth that is captured and delivered to the control device can be calculated by multiplying the percent of the total VOC associated with the coating sprayed in the controlled spray booth zone that is captured and delivered to the control device by the fraction of coating sprayed in the spray booth that is sprayed in the controlled spray booth zone.

2.0 Procedure.

2.1 You may conduct panel testing to determine the capture efficiency of spray booth emissions. You must follow the instructions and calculations in this appendix A, and use the panel testing procedures in ASTM Method D5087-02, “Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement)” (incorporated by reference, see §63.14), or the guidelines presented in “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). You must weigh panels at the points described in section 2.5 of this appendix A and perform calculations as described in sections 3 and 4 of this appendix A. You may conduct panel tests on the production paint line in your facility or in a laboratory simulation of the production paint line in your facility.

2.2 You may conduct panel testing on representative coatings as described in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). If you panel test representative coatings, then you may calculate either a unique percent capture efficiency value for each coating grouped with that representative coating, or a composite percent capture efficiency value for the group of coatings. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency value for that coating.

2.3 Identification of Controlled Spray Booth Zones.

You must identify each controlled spray booth zone or each group of contiguous controlled spray booth zones to be tested. (For example, a controlled bell zone immediately followed by a controlled robotic zone.) Separate panel tests are required for non-contiguous controlled spray booth zones. The flash zone between the last basecoat zone and the first clearcoat zone makes these zones non-contiguous.

2.4 Where to Apply Coating to the Panel.

If you are conducting a panel test for a single controlled spray booth zone, then you must apply coating to the panel only in that controlled spray booth zone. If you are conducting a panel test for a group of contiguous controlled spray booth zones, then you must apply coating to the panel only in that group of contiguous controlled spray booth zones.

2.5 How to Process and When to Weigh the Panel.

The instructions in this section pertain to panel testing of coating, i, or of the coating representing the group of coatings that includes coating, i.

2.5.1 You must weigh the blank panel. (Same as in bake oven panel test.) The mass of the blank panel is represented by $W_{blank,i}$ (grams).

2.5.2 Apply coating, i, or the coating representing coating, i, to the panel in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested (in plant test), or in a simulation of the controlled spray booth zone or group of contiguous controlled spray booth zones being tested (laboratory test).

2.5.3 Remove and weigh the wet panel as soon as the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested. (Different than bake oven panel test.) This weighing must be conducted quickly to avoid further evaporation of VOC. The mass of the wet panel is represented by $W_{wet,i}$ (grams).

2.5.4 Return the wet panel to the point in the coating process or simulation of the coating process where it was removed for weighing.

2.5.5 Allow the panel to travel through the rest of the coating process in the plant or laboratory simulation of the coating process. You must not apply any more coating to the panel after it leaves the

controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested. The rest of the coating process or simulation of the coating process consists of:

2.5.5.1 All of the spray booth zone(s) or simulation of all of the spray booth zone(s) located after the controlled spray booth zone or group of contiguous controlled spray booth zones being tested and before the bake oven where the coating applied to the panel is cured,

2.5.5.2 All of the flash-off area(s) or simulation of all of the flash-off area(s) located after the controlled spray booth zone or group of contiguous controlled spray booth zones being tested and before the bake oven where the coating applied to the panel is cured, and

2.5.5.3 The bake oven or simulation of the bake oven where the coating applied to the panel is cured.

2.5.6 After the panel exits the bake oven, you must cool and weigh the baked panel. (Same as in bake oven panel test.) The mass of the baked panel is represented by $W_{baked,i}$ (grams).

3.0 Panel Calculations.

The instructions in this section pertain to panel testing of coating, i, or of the coating representing the group of coatings that includes coating, i.

3.1 The mass of coating solids (from coating, i, or from the coating representing coating, i, in the panel test) deposited on the panel equals the mass of the baked panel minus the mass of the blank panel as shown in Equation A-1.

$$W_{sdep,i} = W_{baked,i} - W_{blank,i} \qquad \text{(Eq. A-1)}$$

Where:

$W_{sdep,\ i}$ = Mass of coating solids (from coating, i, or from the coating representing coating, i, in the panel test) deposited on the panel, grams.

3.2 The mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested equals the mass of the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested minus the mass of the baked panel as shown in Equation A-2.

$$W_{rem,i} = W_{wet,i} - W_{baked,i} \qquad \text{(Eq. A-2)}$$

Where:

$W_{rem,\ i}$ = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, grams.

3.3 Calculate the mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested per mass of coating solids deposited on the panel as shown in Equation A-3.

$$P_{m,i} = \left(W_{rem,i}\right)/\left(W_{sdep,i}\right) \qquad (Eq.\ A\text{-}3)$$

Where:

$P_{m,\ i}$ = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested per mass of coating solids deposited on the panel, grams of VOC remaining per gram of coating solids deposited.

$W_{rem,\ i}$ = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, grams.

$W_{sdep,\ i}$ = Mass of coating solids (from coating, i, or from the coating representing coating, i, in the panel test) deposited on the panel, grams.

4.0 Converting Panel Result to Percent Capture.

The instructions in this section pertain to panel testing of for coating, i, or of the coating representing the group of coatings that includes coating, i.

4.1 If you panel test representative coatings, then you may convert the panel test result for each representative coating from section 3.3 of this appendix A either to a unique percent capture efficiency value for each coating grouped with that representative coating by using coating specific values for the mass fraction coating solids and mass fraction VOC in section 4.2 of this appendix A, or to a composite percent capture efficiency value for the group of coatings by using the average values for the group of coatings for mass fraction coating solids and mass fraction VOC in section 4.2 of this appendix A. If you panel test each coating, then you must convert the panel test result for each coating to a unique percent capture efficiency value by using coating specific values for the mass fraction coating solids and mass fraction VOC in section 4.2 of this appendix A. The mass fraction of VOC in the coating and the mass fraction of solids in the coating must be determined by Method 24 (appendix A to 40 CFR part 60) or by following the guidelines for combining analytical VOC content and formulation solvent content presented in “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

4.2 The percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the coating solids deposited on the panel that remains on the wet panel when

the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested is calculated using Equation A-4.

$$Pvoc_{pan,i} = \left(P_{m,i}\right)\left(W_{s,i}\right)(100)/\left(Wvoc_{c,i}\right) \qquad (Eq.\ A\text{-}4)$$

Where:

$Pvoc_{pan,\ i}$ = Percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the coating solids deposited on the panel that remains on the wet panel when the wet panel leaves the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested, percent.

$P_{m,\ i}$ = Mass of VOC (from coating, i, or from the coating representing coating, i, in the panel test) remaining on the wet panel when the wet panel leaves the controlled spray booth zone or group of contiguous controlled spray booth zones being tested per mass of coating solids deposited on the panel, grams of VOC remaining per gram of coating solids deposited.

$W_{s,\ i}$ = Mass fraction of coating solids for coating, i, or average mass fraction of coating solids for the group of coatings including coating, i, grams coating solids per gram coating, determined by Method 24 (appendix A to 40 CFR part 60) or by following the guidelines for combining analytical VOC content and formulation solvent content presented in “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

$Wvoc_{c,\ i}$ = Mass fraction of VOC in coating, i, or average mass fraction of VOC for the group of coatings including coating, i, grams VOC per grams coating, determined by Method 24 (appendix A to 40 CFR part 60) or the guidelines for combining analytical VOC content and formulation solvent content presented in “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

4.3 The percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the coating sprayed in the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested that is captured in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, $CE_{zone,i}$ (percent), is calculated using Equation A-5.

$$CE_{zone,i} = 100 - Pvoc_{pan,i} \qquad (Eq.\ A\text{-}5)$$

Where:

$CE_{zone,\ i}$ = Capture efficiency for coating, i, or for the group of coatings including coating, i, in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested as a

percentage of the VOC in the coating, i, or of the group of coatings including coating, i, sprayed in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, percent.

4.4 Calculate the percent of VOC for coating, i, or composite percent of VOC for the group of coatings including coating, i, associated with the entire volume of coating, i, or with the total volume of all of the coatings grouped with coating, i, sprayed in the entire spray booth that is captured in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, using Equation A-6. The volume of coating, i, or of the group of coatings including coating, i, sprayed in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, and the volume of coating, i, or of the group of coatings including coating, i, sprayed in the entire spray booth may be determined from gun on times and fluid flow rates or from direct measurements of coating usage.

$$CE_i = \left(CE_{zone,i}\right)\left(V_{zone,i}\right)/\left(V_{booth,i}\right) \qquad S(Eq.\ \text{A-6})$$

Where:

CE_i = Capture efficiency for coating, i, or for the group of coatings including coating, i, in the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested as a percentage of the VOC in the coating, i, or of the group of coatings including coating, i, sprayed in the entire spray booth in which the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested, percent.

$V_{zone,\ i}$ = Volume of coating, i, or of the group of coatings including coating, i, sprayed in the controlled spray booth zone or group of contiguous controlled spray booth zones being tested, liters.

$V_{booth,\ i}$ = Volume of coating, i, or of the group of coatings including coating, i, sprayed in the entire spray booth containing the controlled spray booth zone (or group of contiguous controlled spray booth zones) being tested, liters.

4.5 If you conduct multiple panel tests for the same coating or same group of coatings in the same spray booth (either because the coating or group of coatings is controlled in non-contiguous zones of the spray booth, or because you choose to conduct separate panel tests for contiguous controlled spray booth zones), then you may add the result from section 4.4 for each such panel test to get the total capture efficiency for the coating or group of coatings over all of the controlled zones in the spray booth for the coating or group of coatings.

Title 40: Protection of Environment
PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart EEEE—National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)

Source: 69 FR 5063, Feb. 3, 2004, unless otherwise noted.

What This Subpart Covers

§63.2330 What is the purpose of this subpart?

This subpart establishes national emission limitations, operating limits, and work practice standards for organic hazardous air pollutants (HAP) emitted from organic liquids distribution (OLD) (non-gasoline) operations at major sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations, operating limits, and work practice standards.

§63.2334 Am I subject to this subpart?

(a) Except as provided for in paragraphs (b) and (c) of this section, you are subject to this subpart if you own or operate an OLD operation that is located at, or is part of, a major source of HAP emissions. An OLD operation may occupy an entire plant site or be collocated with other industrial (*e.g.,* manufacturing) operations at the same plant site.

(b) Organic liquid distribution operations located at research and development facilities, consistent with section 112(c)(7) of the Clean Air Act (CAA), are not subject to this subpart.

(c) Organic liquid distribution operations do not include the activities and equipment, including product loading racks, used to process, store, or transfer organic liquids at facilities listed in paragraph (c) (1) and (2) of this section.

(1) Oil and natural gas production field facilities, as the term “facility” is defined in §63.761 of subpart HH.

(2) Natural gas transmission and storage facilities, as the term “facility” is defined in §63.1271 of subpart HHH.

§63.2338 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing OLD operation affected source.

(b) Except as provided in paragraph (c) of this section, the affected source is the collection of activities and equipment used to distribute organic liquids into, out of, or within a facility that is a major source of HAP. The affected source is composed of:

(1) All storage tanks storing organic liquids.

(2) All transfer racks at which organic liquids are loaded into or unloaded out of transport vehicles and/or containers.

(3) All equipment leak components in organic liquids service that are associated with:

(i) Storage tanks storing organic liquids;

(ii) Transfer racks loading or unloading organic liquids;

(iii) Pipelines that transfer organic liquids directly between two storage tanks that are subject to this subpart;

(iv) Pipelines that transfer organic liquids directly between a storage tank subject to this subpart and a transfer rack subject to this subpart; and

(v) Pipelines that transfer organic liquids directly between two transfer racks that are subject to this subpart.

(4) All transport vehicles while they are loading or unloading organic liquids at transfer racks subject to this subpart.

(5) All containers while they are loading or unloading organic liquids at transfer racks subject to this subpart.

(c) The equipment listed in paragraphs (c)(1) through (4) of this section and used in the identified operations is excluded from the affected source.

(1) Storage tanks, transfer racks, transport vehicles, containers, and equipment leak components that are part of an affected source under another 40 CFR part 63 national emission standards for hazardous air pollutants (NESHAP).

(2) Non-permanent storage tanks, transfer racks, transport vehicles, containers, and equipment leak components when used in special situation distribution loading and unloading operations (such as maintenance or upset liquids management).

(3) Storage tanks, transfer racks, transport vehicles, containers, and equipment leak components when used to conduct maintenance activities, such as stormwater management, liquid removal from tanks for inspections and maintenance, or changeovers to a different liquid stored in a storage tank.

(d) An affected source is a new affected source if you commenced construction of the affected source after April 2, 2002, and you meet the applicability criteria in §63.2334 at the time you commenced operation.

(e) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2.

(f) An affected source is existing if it is not new or reconstructed.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42904, July 28, 2006]

§63.2342 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to the schedule identified in paragraph (a)(1), (a)(2), or (a)(3) of this section, as applicable.

(1)(i) Except as provided in paragraph (a)(1)(ii) of this section, if you startup your new affected source on or before February 3, 2004 or if you reconstruct your affected source on or before February 3, 2004, you must comply with the emission limitations, operating limits, and work practice standards for new and reconstructed sources in this subpart no later than February 3, 2004.

(ii) For any emission source listed in paragraph §63.2338(b) at an affected source that commenced construction or reconstruction after April 2, 2002, but before February 3, 2004, that is required to be controlled based on the applicability criteria in this subpart, but:

(A) Would not have been required to be controlled based on the applicability criteria as proposed for this subpart, you must comply with the emission limitations, operating limits, and work practice standards for each such emission source based on the schedule found in paragraph (b) of this section or at startup, whichever is later; or

(B) Would have been subject to a less stringent degree of control requirement as proposed for this subpart, you must comply with the emission limitations, operating limits, and work practice standards in this subpart for each such emission source based on the schedule found in paragraph (b) of this section or at startup, whichever is later, and if you start up your affected new or reconstructed source before February 5, 2007, you must comply with the emission limitations, operating limits, and work practice standards for each such emission source as proposed for this subpart, until you are required to comply with the emission limitations, operating limits, and work practice standards in this subpart for each such emission source based on the schedule found in paragraph (b) of this section.

(2) If you commence construction of or reconstruct your affected source after February 3, 2004, you must comply with the emission limitations, operating limits, and work practice standards for new and reconstructed sources in this subpart upon startup of your affected source.

(3) If, after startup of a new affected source, the total actual annual facility-level organic liquid loading volume at that source exceeds the criteria for control in Table 2 to this subpart, items 9 and 10, the owner or operator must comply with the transfer rack requirements specified in §63.2346(b)

immediately; that is, be in compliance the first day of the period following the end of the 3-year period triggering the control criteria.

(b)(1) If you have an existing affected source, you must comply with the emission limitations, operating limits, and work practice standards for existing affected sources no later than February 5, 2007, except as provided in paragraphs (b)(2) and (3) of this section.

(2) Floating roof storage tanks at existing affected sources must be in compliance with the work practice standards in Table 4 to this subpart, item 1, at all times after the next degassing and cleaning activity or within 10 years after February 3, 2004, whichever occurs first. If the first degassing and cleaning activity occurs during the 3 years following February 3, 2004, the compliance date is February 5, 2007.

(3)(i) If an addition or change other than reconstruction as defined in §63.2 is made to an existing affected facility that causes the total actual annual facility-level organic liquid loading volume to exceed the criteria for control in Table 2 to this subpart, items 7 and 8, the owner or operator must comply with the transfer rack requirements specified in §63.2346(b) immediately; that is, be in compliance the first day of the period following the end of the 3-year period triggering the control criteria.

(ii) If the owner or operator believes that compliance with the transfer rack emission limits cannot be achieved immediately, as specified in paragraph (b)(3)(i) of this section, the owner or operator may submit a request for a compliance extension, as specified in paragraphs (b)(3)(ii)(A) through (I) of this section. Subject to paragraph (b)(3)(ii)(B) of this section, until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph (b)(3)(ii), the owner or operator of the transfer rack subject to the requirements of this section shall comply with all applicable requirements of this subpart. Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

(A) *Submittal.* The owner or operator shall submit a request for a compliance extension to the Administrator (or a State, when the State has an approved 40 CFR part 70 permit program and the source is required to obtain a 40 CFR part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) seeking an extension allowing the source up to 1 additional year to comply with the transfer rack standard, if such additional period is necessary for the installation of controls. The owner or operator of the affected source who has requested an extension of compliance under this paragraph (b)(3)(ii)(A) and who is otherwise required to obtain a title V permit shall apply for such permit, or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph (b)(3)(ii)(A) will be incorporated into the affected source's title V permit according to the provisions of 40 CFR part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) *When to submit.* (*1*) Any request submitted under paragraph (b)(3)(ii)(A) of this section must be submitted in writing to the appropriate authority no later than 120 days prior to the affected source's compliance date (as specified in paragraph (b)(3)(i) of this section), except as provided for in paragraph

(b)(3)(ii)(B)(*2*) of this section. Nonfrivolous requests submitted under this paragraph (b)(3)(ii)(B)(*1*) will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the date of denial.

(*2*) An owner or operator may submit a compliance extension request after the date specified in paragraph (b)(3)(ii)(B)(*1*) of this section provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date and the need arose due to circumstances beyond reasonable control of the owner or operator. This request must include, in addition to the information required in paragraph (b)(3)(ii)(C) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Nonfrivolous requests submitted under this paragraph (b)(3)(ii)(B)(*2*) will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the original compliance date.

(C) *Information required.* The request for a compliance extension under paragraph (b)(3)(ii)(A) of this section shall include the following information:

(*1*) The name and address of the owner or operator and the address of the existing source if it differs from the address of the owner or operator;

(*2*) The name, address, and telephone number of a contact person for further information;

(*3*) An identification of the organic liquid distribution operation and of the specific equipment for which additional compliance time is required;

(*4*) A description of the controls to be installed to comply with the standard;

(*5*) Justification for the length of time being requested; and

(*6*) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(*i*) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated;

(*ii*) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

(*iii*) The date by which final compliance is to be achieved.

(D) *Approval of request for extension of compliance.* Based on the information provided in any request made under paragraph (b)(3)(ii)(C) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with the transfer rack emission standard, as specified in paragraph (b)(3)(ii) of this section. The extension will be in writing and will—

(*1*) Identify each affected source covered by the extension;

(*2*) Specify the termination date of the extension;

(*3*) Specify the dates by which steps toward compliance are to be taken, if appropriate;

(*4*) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests);

(*5*) Specify the contents of the progress reports to be submitted and the dates by which such reports are to be submitted, if required pursuant to paragraph (b)(3)(ii)(E) of this section.

(*6*) Under paragraph (b)(3)(ii) of this section, specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period.

(E) *Progress reports.* The owner or operator of an existing source that has been granted an extension of compliance under paragraph (b)(3)(ii)(D) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached.

(F) *Notification of approval or intention to deny.* (*1*) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (b)(3)(ii) of this section. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application; that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. Failure by the Administrator to act within 30 calendar days to approve or disapprove a request submitted under paragraph (b)(3)(ii) of this section does not constitute automatic approval of the request.

(*2*) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(*3*) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with:

(*i*) Notice of the information and findings on which the intended denial is based; and

(*ii*) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.

(*4*) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(G) *Termination of extension of compliance.* The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraph (b)(3)(ii)(D)(*3*) or paragraph (b)(3)(ii)(D)(*4*) of this section is not met. Upon a determination to terminate, the Administrator will notify, in writing, the owner or operator of the Administrator's determination to terminate, together with:

(*1*) Notice of the reason for termination; and

(*2*) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the determination to terminate, additional information or arguments to the Administrator before further action on the termination.

(*3*) A final determination to terminate an extension of compliance will be in writing and will set forth the specific grounds on which the termination is based. The final determination will be made within 30 calendar days after presentation of additional information or arguments, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(H) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the CAA.

(I) *Limitation on use of compliance extension.* The owner or operator may request an extension of compliance under the provisions specified in paragraph (b)(3)(ii) of this section only once for each facility.

(c) If you have an area source that does not commence reconstruction but increases its emissions or its potential to emit such that it becomes a major source of HAP emissions and an existing affected source subject to this subpart, you must be in compliance by 3 years after the area source becomes a major source.

(d) You must meet the notification requirements in §§63.2343 and 63.2382(a), as applicable, according to the schedules in §63.2382(a) and (b)(1) through (3) and in subpart A of this part. Some of these notifications must be submitted before the compliance dates for the emission limitations, operating limits, and work practice standards in this subpart.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42905, July 28, 2006]

§63.2343 What are my requirements for emission sources not requiring control?

This section establishes the notification, recordkeeping, and reporting requirements for emission sources identified in §63.2338 that do not require control under this subpart (i.e., under paragraphs (a) through (e) of §63.2346). Such emission sources are not subject to any other notification, recordkeeping, or reporting sections in this subpart, including §63.2350(c), except as indicated in paragraphs (a) through (d) of this section.

(a) For each storage tank subject to this subpart having a capacity of less than 18.9 cubic meters (5,000 gallons) and for each transfer rack subject to this subpart that only unloads organic liquids (i.e., no organic liquids are loaded at any of the transfer racks), you must keep documentation that verifies that each storage tank and transfer rack identified in paragraph (a) of this section is not required to be controlled. The documentation must be kept up-to-date (i.e., all such emission sources at a facility are identified in the documentation regardless of when the documentation was last compiled) and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location. The documentation may consist of identification of the tanks and transfer racks identified in paragraph (a) of this section on a plant site plan or process and instrumentation diagram (P&ID).

(b) For each storage tank subject to this subpart having a capacity of 18.9 cubic meters (5,000 gallons) or more that is not subject to control based on the criteria specified in Table 2 to this subpart, items 1 through 6, you must comply with the requirements specified in paragraphs (b)(1) through (3) of this section.

(1)(i) You must submit the information in §63.2386(c)(1), (2), (3), and (10)(i) in either the Notification of Compliance Status, according to the schedule specified in Table 12 to this subpart, or in your first Compliance report, according to the schedule specified in §63.2386(b), whichever occurs first.

(ii)(A) If you submit your first Compliance report before your Notification of Compliance Status, the Notification of Compliance Status must contain the information specified in §63.2386(d)(3) and (4) if any of the changes identified in paragraph (d) of this section have occurred since the filing of the first Compliance report. If none of the changes identified in paragraph (d) of this section have occurred since the filing of the first Compliance report, you do not need to report the information specified in §63.2386(c)(10)(i) when you submit your Notification of Compliance Status.

(B) If you submit your Notification of Compliance Status before your first Compliance report, your first Compliance report must contain the information specified in §63.2386(d)(3) and (4) if any of the changes specified in paragraph (d) of this section have occurred since the filing of the Notification of Compliance Status.

(iii) If you are already submitting a Notification of Compliance Status or a first Compliance report under §63.2386(c), you do not need to submit a separate Notification of Compliance Status or first Compliance

report for each storage tank that meets the conditions identified in paragraph (b) of this section (i.e., a single Notification of Compliance Status or first Compliance report should be submitted).

(2)(i) You must submit a subsequent Compliance report according to the schedule in §63.2386(b) whenever any of the events in paragraph (d) of this section occur, as applicable.

(ii) Your subsequent Compliance reports must contain the information in §63.2386(c)(1), (2), (3) and, as applicable, in §63.2386(d)(3) and (4). If you are already submitting a subsequent Compliance report under §63.2386(d), you do not need to submit a separate subsequent Compliance report for each storage tank that meets the conditions identified in paragraph (b) of this section (i.e., a single subsequent Compliance report should be submitted).

(3) For each storage tank that meets the conditions identified in paragraph (b) of this section, you must keep documentation, including a record of the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid, that verifies the storage tank is not required to be controlled under this subpart. The documentation must be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location.

(c) For each transfer rack subject to this subpart that loads organic liquids but is not subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, you must comply with the requirements specified in paragraphs (c)(1) through (3) of this section.

(1)(i) You must submit the information in §63.2386(c)(1), (2), (3), and (10)(i) in either the Notification of Compliance Status, according to the schedule specified in Table 12 to this subpart, or a first Compliance report, according to the schedule specified in §63.2386(b), whichever occurs first.

(ii)(A) If you submit your first Compliance report before your Notification of Compliance Status, the Notification of Compliance Status must contain the information specified in §63.2386(d)(3) and (4) if any of the changes identified in paragraph (d) of this section have occurred since the filing of the first Compliance report. If none of the changes identified in paragraph (d) of this section have occurred since the filing of the first Compliance report, you do not need to report the information specified in §63.2386(c)(10)(i) when you submit your Notification of Compliance Status.

(B) If you submit your Notification of Compliance Status before your first Compliance report, your first Compliance report must contain the information specified in §63.2386(d)(3) and (4) if any of the changes specified in paragraph (d) of this section have occurred since the filing of the Notification of Compliance Status.

(iii) If you are already submitting a Notification of Compliance Status or a first Compliance report under §63.2386(c), you do not need to submit a separate Notification of Compliance Status or first Compliance report for each transfer rack that meets the conditions identified in paragraph (b) of this section (i.e., a single Notification of Compliance Status or first Compliance report should be submitted).

(2)(i) You must submit a subsequent Compliance report according to the schedule in §63.2386(b) whenever any of the events in paragraph (d) of this section occur, as applicable.

(ii) Your subsequent Compliance reports must contain the information in §63.2386(c)(1), (2), (3) and, as applicable, in §63.2386(d)(3) and (4). If you are already submitting a subsequent Compliance report under §63.2386(d), you do not need to submit a separate subsequent Compliance report for each transfer rack that meets the conditions identified in paragraph (c) of this section (i.e., a single subsequent Compliance report should be submitted).

(3) For each transfer rack that meets the conditions identified in paragraph (c) of this section, you must keep documentation, including the records specified in §63.2390(d), that verifies the transfer rack is not required to be controlled under this subpart. The documentation must be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location.

(d) If one or more of the events identified in paragraphs (d)(1) through (4) of this section occur since the filing of the Notification of Compliance Status or the last Compliance report, you must submit a subsequent Compliance report as specified in paragraphs (b)(2) and (c)(2) of this section.

(1) Any storage tank or transfer rack became subject to control under this subpart EEEE; or

(2) Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) became part of the affected source but is not subject to any of the emission limitations, operating limits, or work practice standards of this subpart; or

(3) Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; or

(4) Any of the information required in §63.2386(c)(1), §63.2386(c)(2), or §63.2386(c)(3) has changed.

[71 FR 42906, July 28, 2006, as amended at 73 FR 21830, Apr. 23, 2008]

Emission Limitations, Operating Limits, and Work Practice Standards

§63.2346 What emission limitations, operating limits, and work practice standards must I meet?

(a) *Storage tanks.* For each storage tank storing organic liquids that meets the tank capacity and liquid vapor pressure criteria for control in Table 2 to this subpart, items 1 through 5, you must comply with paragraph (a)(1), (a)(2), (a)(3), or (a)(4) of this section. For each storage tank storing organic liquids that meets the tank capacity and liquid vapor pressure criteria for control in Table 2 to this subpart, item 6, you must comply with paragraph (a)(1), (a)(2), or (a)(4) of this section.

(1) Meet the emission limits specified in Table 2 to this subpart and comply with the applicable requirements specified in 40 CFR part 63, subpart SS, for meeting emission limits, except substitute the term “storage tank” at each occurrence of the term “storage vessel” in subpart SS.

(2) Route emissions to fuel gas systems or back into a process as specified in 40 CFR part 63, subpart SS.

(3) Comply with 40 CFR part 63, subpart WW (control level 2).

(4) Use a vapor balancing system that complies with the requirements specified in paragraphs (a)(4)(i) through (vii) of this section and with the recordkeeping requirements specified in §63.2390(e).

(i) The vapor balancing system must be designed and operated to route organic HAP vapors displaced from loading of the storage tank to the transport vehicle from which the storage tank is filled.

(ii) Transport vehicles must have a current certification in accordance with the United States Department of Transportation (U.S. DOT) pressure test requirements of 49 CFR part 180 for cargo tanks and 49 CFR 173.31 for tank cars.

(iii) Organic liquids must only be unloaded from cargo tanks or tank cars when vapor collection systems are connected to the storage tank's vapor collection system.

(iv) No pressure relief device on the storage tank, or on the cargo tank or tank car, shall open during loading or as a result of diurnal temperature changes (breathing losses).

(v) Pressure relief devices must be set to no less than 2.5 pounds per square inch guage (psig) at all times to prevent breathing losses. Pressure relief devices may be set at values less than 2.5 psig if the owner or operator provides rationale in the notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times. The owner or operator shall comply with paragraphs (a)(4)(v)(A) through (C) of this section for each pressure relief valve.

(A) The pressure relief valve shall be monitored quarterly using the method described in §63.180(b).

(B) An instrument reading of 500 parts per million by volume (ppmv) or greater defines a leak.

(C) When a leak is detected, it shall be repaired as soon as practicable, but no later than 5 days after it is detected, and the owner or operator shall comply with the recordkeeping requirements of §63.181(d)(1) through (4).

(vi) Cargo tanks and tank cars that deliver organic liquids to a storage tank must be reloaded or cleaned at a facility that utilizes the control techniques specified in paragraph (a)(4)(vi)(A) or (a)(4)(vi)(B) of this section.

(A) The cargo tank or tank car must be connected to a closed-vent system with a control device that reduces inlet emissions of total organic HAP by 95 percent by weight or greater or to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3 percent oxygen for combustion devices using supplemental combustion air.

(B) A vapor balancing system designed and operated to collect organic HAP vapor displaced from the cargo tank or tank car during reloading must be used to route the collected vapor to the storage tank

from which the liquid being transferred originated or to another storage tank connected to a common header.

(vii) The owner or operator of the facility where the cargo tank or tank car is reloaded or cleaned must comply with paragraphs (a)(4)(vii)(A) through (D) of this section.

(A) Submit to the owner or operator of the storage tank and to the Administrator a written certification that the reloading or cleaning facility will meet the requirements of paragraph (a)(4)(vii)(A) through (C) of this section. The certifying entity may revoke the written certification by sending a written statement to the owner or operator of the storage tank giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the requirements of this paragraph (a)(4)(vii) of this section.

(B) If complying with paragraph (a)(4)(vi)(A) of this section, comply with the requirements for a closed vent system and control device as specified in this subpart EEEE. The notification requirements in §63.2382 and the reporting requirements in §63.2386 do not apply to the owner or operator of the offsite cleaning or reloading facility.

(C) If complying with paragraph (a)(4)(vi)(B) of this section, keep the records specified in §63.2390(e)(3) or equivalent recordkeeping approved by the Administrator.

(D) After the compliance dates specified in §63.2342, at an offsite reloading or cleaning facility subject to §63.2346(a)(4), compliance with the monitoring, recordkeeping, and reporting provisions of any other subpart of this part 63 that has monitoring, recordkeeping, and reporting provisions constitutes compliance with the monitoring, recordkeeping and reporting provisions of §63.2346(a)(4)(vii)(B) or §63.2346(a)(4)(vii)(C). You must identify in your notification of compliance status report required by §63.2382(d) the subpart of this part 63 with which the owner or operator of the offsite reloading or cleaning facility complies.

(b) *Transfer racks.* For each transfer rack that is part of the collection of transfer racks that meets the total actual annual facility-level organic liquid loading volume criterion for control in Table 2 to this subpart, items 7 through 10, you must comply with paragraph (b)(1), (b)(2), or (b)(3) of this section for each arm in the transfer rack loading an organic liquid whose organic HAP content meets the organic HAP criterion for control in Table 2 to this subpart, items 7 through 10. For existing affected sources, you must comply with paragraph (b)(1), (b)(2), or (b)(3)(i) of this section during the loading of organic liquids into transport vehicles. For new affected sources, you must comply with paragraph (b)(1), (b)(2), or (b)(3)(i) and (ii) of this section during the loading of organic liquids into transport vehicles and containers. If the total actual annual facility-level organic liquid loading volume at any affected source is equal to or greater than the loading volume criteria for control in Table 2 to this subpart, but at a later date is less than the loading volume criteria for control, compliance with paragraph (b)(1), (b)(2), or (b)(3) of this section is no longer required. For new sources and reconstructed sources, as defined in §63.2338(d) and (e), if at a later date, the total actual annual facility-level organic liquid loading volume again becomes equal to or greater than the loading volume criteria for control in Table 2 to this subpart,

the owner or operator must comply with paragraph (b)(1), (b)(2), or (b)(3)(i) and (ii) of this section immediately, as specified in §63.2342(a)(3). For existing sources, as defined in §63.2338(f), if at a later date, the total actual annual facility-level organic liquid loading volume again becomes equal to or greater than the loading volume criteria for control in Table 2 to this subpart, the owner or operator must comply with paragraph (b)(1), (b)(2), or (b)(3)(i) of this section immediately, as specified in §63.2342(b)(3)(i), unless an alternative compliance schedule has been approved under §63.2342(b)(3)(ii) and subject to the use limitation specified in §63.2342(b)(3)(ii)(I).

(1) Meet the emission limits specified in Table 2 to this subpart and comply with the applicable requirements for transfer racks specified in 40 CFR part 63, subpart SS, for meeting emission limits.

(2) Route emissions to fuel gas systems or back into a process as specified in 40 CFR part 63, subpart SS.

(3)(i) Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header.

(ii) Use a vapor balancing system that routes the organic HAP vapors displaced from the loading of organic liquids into containers directly (e.g., no intervening tank or containment area such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header.

(c) *Equipment leak components.* For each pump, valve, and sampling connection that operates in organic liquids service for at least 300 hours per year, you must comply with the applicable requirements under 40 CFR part 63, subpart TT (control level 1), subpart UU (control level 2), or subpart H. Pumps, valves, and sampling connectors that are insulated to provide protection against persistent sub-freezing temperatures are subject to the “difficult to monitor” provisions in the applicable subpart selected by the owner or operator. This paragraph only applies if the affected source has at least one storage tank or transfer rack that meets the applicability criteria for control in Table 2 to this subpart.

(d) *Transport vehicles.* For each transport vehicle equipped with vapor collection equipment that is loaded at a transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, you must comply with paragraph (d)(1) of this section. For each transport vehicle without vapor collection equipment that is loaded at a transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, you must comply with paragraph (d)(2) of this section.

(1) Follow the steps in 40 CFR 60.502(e) to ensure that organic liquids are loaded only into vapor-tight transport vehicles and comply with the provisions in 40 CFR 60.502(f) through (i), except substitute the term “transport vehicle” at each occurrence of the term “tank truck” or “gasoline tank truck” in those paragraphs.

(2) Ensure that organic liquids are loaded only into transport vehicles that have a current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements in 49 CFR part 180 for cargo tanks or 49 CFR 173.31 for tank cars.

(e) *Operating limits.* For each high throughput transfer rack, you must meet each operating limit in Table 3 to this subpart for each control device used to comply with the provisions of this subpart whenever emissions from the loading of organic liquids are routed to the control device. For each storage tank and low throughput transfer rack, you must comply with the requirements for monitored parameters as specified in subpart SS of this part for storage vessels and, during the loading of organic liquids, for low throughput transfer racks, respectively. Alternatively, you may comply with the operating limits in Table 3 to this subpart.

(f) For noncombustion devices, if you elect to demonstrate compliance with a percent reduction requirement in Table 2 to this subpart using total organic compounds (TOC) rather than organic HAP, you must first demonstrate, subject to the approval of the Administrator, that TOC is an appropriate surrogate for organic HAP in your case; that is, for your storage tank(s) and/or transfer rack(s), the percent destruction of organic HAP is equal to or higher than the percent destruction of TOC. This demonstration must be conducted prior to or during the initial compliance test.

(g) As provided in §63.6(g), you may request approval from the Administrator to use an alternative to the emission limitations, operating limits, and work practice standards in this section. You must follow the procedures in §63.177(b) through (e) in applying for permission to use such an alternative. If you apply for permission to use an alternative to the emission limitations, operating limits, and work practice standards in this section, you must submit the information described in §63.6(g)(2).

(h) [Reserved]

(i) Opening of a safety device is allowed at any time that it is required to avoid unsafe operating conditions.

(j) If you elect to comply with this subpart by combining emissions from different emission sources subject to this subpart in a single control device, then you must comply with the provisions specified in §63.982(f).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42908, July 28, 2006; 73 FR 40981, July 17, 2008; 73 FR 21830, Apr. 23, 2008]

General Compliance Requirements

§63.2350 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limits, and work practice standards in this subpart at all times when the equipment identified in §63.2338(b)(1) through (4) is in OLD operation.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) Except for emission sources not required to be controlled as specified in §63.2343, you must develop a written startup, shutdown, and malfunction (SSM) plan according to the provisions in §63.6(e)(3).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42909, July 28, 2006]

Testing and Initial Compliance Requirements

§63.2354 What performance tests, design evaluations, and performance evaluations must I conduct?

(a)(1) For each performance test that you conduct, you must use the procedures specified in subpart SS of this part and the provisions specified in paragraph (b) of this section.

(2) For each design evaluation you conduct, you must use the procedures specified in subpart SS of this part.

(3) For each performance evaluation of a continuous emission monitoring system (CEMS) you conduct, you must follow the requirements in §63.8(e).

(b)(1) For nonflare control devices, you must conduct each performance test according to the requirements in §63.7(e)(1), and either §63.988(b), §63.990(b), or §63.995(b), using the procedures specified in §63.997(e).

(2) You must conduct three separate test runs for each performance test on a nonflare control device as specified in §§63.7(e)(3) and 63.997(e)(1)(v). Each test run must last at least 1 hour, except as provided in §63.997(e)(1)(v)(A) and (B).

(3)(i) In addition to EPA Method 25 or 25A of 40 CFR part 60, appendix A, to determine compliance with the organic HAP or TOC emission limit, you may use EPA Method 18 of 40 CFR part 60, appendix A, as specified in paragraph (b)(3)(i) of this section. As an alternative to EPA Method 18, you may use ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (incorporated by reference, see §63.14), under the conditions specified in paragraph (b)(3)(ii) of this section.

(A) If you use EPA Method 18 to measure compliance with the percentage efficiency limit, you must first determine which organic HAP are present in the inlet gas stream (i.e., uncontrolled emissions) using knowledge of the organic liquids or the screening procedure described in EPA Method 18. In conducting the performance test, you must analyze samples collected as specified in EPA Method 18, simultaneously at the inlet and outlet of the control device. Quantify the emissions for the same organic HAP identified as present in the inlet gas stream for both the inlet and outlet gas streams of the control device.

(B) If you use EPA Method 18 of 40 CFR part 60, appendix A, to measure compliance with the emission concentration limit, you must first determine which organic HAP are present in the inlet gas stream using knowledge of the organic liquids or the screening procedure described in EPA Method 18. In conducting the performance test, analyze samples collected as specified in EPA Method 18 at the outlet of the control device. Quantify the control device outlet emission concentration for the same organic HAP identified as present in the inlet or uncontrolled gas stream.

(ii) You may use ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (incorporated by reference, see §63.14), as an alternative to EPA Method 18 if the target concentration is between 150 parts per billion by volume and 100 ppmv and either of the conditions specified in paragraph (b)(2)(ii)(A) or (B) of this section exists. For target compounds not listed in Section 1.1 of ASTM D6420-99 (Reapproved 2004) and not amenable to detection by mass spectrometry, you may not use ASTM D6420-99 (Reapproved 2004).

(A) The target compounds are those listed in Section 1.1 of ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (incorporated by reference, see §63.14),; or

(B) For target compounds not listed in Section 1.1 of ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (incorporated by reference, see §63.14), but potentially detected by mass spectrometry, the additional system continuing calibration check after each run, as detailed in ASTM D6420-99 (Reapproved 2004), Section 10.5.3, must be followed, met, documented, and submitted with the data report, even if there is no moisture condenser used or the compound is not considered water-soluble.

(4) If a principal component of the uncontrolled or inlet gas stream to the control device is formaldehyde, you may use EPA Method 316 of appendix A of this part instead of EPA Method 18 of 40 CFR part 60, appendix A, for measuring the formaldehyde. If formaldehyde is the predominant organic HAP in the inlet gas stream, you may use EPA Method 316 alone to measure formaldehyde either at the inlet and outlet of the control device using the formaldehyde control efficiency as a surrogate for total organic HAP or TOC efficiency, or at the outlet of a combustion device for determining compliance with the emission concentration limit.

(5) You may not conduct performance tests during periods of SSM, as specified in §63.7(e)(1).

(c) To determine the HAP content of the organic liquid, you may use EPA Method 311 of 40 CFR part 63, appendix A, or other method approved by the Administrator. In addition, you may use other means, such as voluntary consensus standards, material safety data sheets (MSDS), or certified product data sheets, to determine the HAP content of the organic liquid. If the method you select to determine the HAP content provides HAP content ranges, you must use the upper end of each HAP content range in determining the total HAP content of the organic liquid. The EPA may require you to test the HAP

content of an organic liquid using EPA Method 311 or other method approved by the Administrator. If the results of the EPA Method 311 (or any other approved method) are different from the HAP content determined by another means, the EPA Method 311 (or approved method) results will govern.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42909, July 28, 2006]

§63.2358 By what date must I conduct performance tests and other initial compliance demonstrations?

(a) You must conduct initial performance tests and design evaluations according to the schedule in §63.7(a)(2), or by the compliance date specified in any applicable State or Federal new source review construction permit to which the affected source is already subject, whichever is earlier.

(b)(1) For storage tanks and transfer racks at existing affected sources complying with the emission limitations listed in Table 2 to this subpart, you must demonstrate initial compliance with the emission limitations within 180 days after February 5, 2007, except as provided in paragraphs (b)(1)(i) and (b)(1)(ii) of this section.

(i) For storage tanks with an existing internal or external floating roof, complying with item 1.a.ii. in Table 2 to this subpart and item 1.a. in Table 4 to this subpart, you must conduct your initial compliance demonstration the next time the storage tank is emptied and degassed, but not later than February 3, 2014.

(ii) For storage tanks complying with item 1.a.ii. or 6.a.ii in Table 2 of this subpart and item 1.b., 1.c., or 2. in Table 4 of this subpart, you must comply within 180 days after April 25, 2011.

(2) For storage tanks and transfer racks at reconstructed or new affected sources complying with the emission limitations listed in Table 2 to this subpart, you must conduct your initial compliance demonstration with the emission limitations within 180 days after the initial startup date for the affected source or February 3, 2004, whichever is later.

(c)(1) For storage tanks at existing affected sources complying with the work practice standard in Table 4 to this subpart, you must conduct your initial compliance demonstration as specified in paragraphs (c)(1)(i) and (c)(1)(ii) of this section.

(i) For storage tanks with an existing internal or external floating roof, complying with item 1.a. in Table 4 of this subpart, you must conduct your initial compliance demonstration the next time the storage tank is emptied and degassed, but not later than February 3, 2014.

(ii) For other storage tanks not specified in paragraph (c)(1)(i) of this section, you must comply within 180 days after April 25, 2011.

(2) For transfer racks and equipment leak components at existing affected sources complying with the work practice standards in Table 4 to this subpart, you must conduct your initial compliance demonstration within 180 days after February 5, 2007.

(d) For storage tanks, transfer racks, and equipment leak components at reconstructed or new affected sources complying with the work practice standards in Table 4 to this subpart, you must conduct your initial compliance demonstration within 180 days after the initial startup date for the affected source.

[69 FR 5063, Feb. 3, 2004, as amended at 73 FR 40981, July 17, 2008]

§63.2362 When must I conduct subsequent performance tests?

(a) For nonflare control devices, you must conduct subsequent performance testing required in Table 5 to this subpart, item 1, at any time the EPA requests you to in accordance with section 114 of the CAA.

(b)(1) For each transport vehicle that you own that is equipped with vapor collection equipment and that is loaded with organic liquids at a transfer rack that is subject to control based on the criteria specified in Table 2 to this subpart, items 7 through 10, you must perform the vapor tightness testing required in Table 5 to this subpart, item 2, on that transport vehicle at least once per year.

(2) For transport vehicles that you own that do not have vapor collection equipment, you must maintain current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR part 180 for cargo tanks or 49 CFR 173.31 for tank cars.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006]

§63.2366 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain a CMS on each control device required in order to comply with this subpart. If you use a continuous parameter monitoring system (CPMS) (as defined in §63.981), you must comply with the applicable requirements for CPMS in subpart SS of this part for the control device being used. If you use a continuous emissions monitoring system (CEMS), you must comply with the requirements in §63.8.

(b) For nonflare control devices controlling storage tanks and low throughput transfer racks, you must submit a monitoring plan according to the requirements in subpart SS of this part for monitoring plans.

§63.2370 How do I demonstrate initial compliance with the emission limitations, operating limits, and work practice standards?

(a) You must demonstrate initial compliance with each emission limitation and work practice standard that applies to you as specified in tables 6 and 7 to this subpart.

(b) You demonstrate initial compliance with the operating limits requirements specified in §63.2346(e) by establishing the operating limits during the initial performance test or design evaluation.

(c) You must submit the results of the initial compliance determination in the Notification of Compliance Status according to the requirements in §63.2382(d).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006]

Continuous Compliance Requirements

§63.2374 When do I monitor and collect data to demonstrate continuous compliance and how do I use the collected data?

(a) You must monitor and collect data according to subpart SS of this part and paragraphs (b) and (c) of this section.

(b) When using a control device to comply with this subpart, you must monitor continuously or collect data at all required intervals at all times that the emission source and control device are in OLD operation, except for CMS malfunctions (including any malfunction preventing the CMS from operating properly), associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments).

(c) Do not use data recorded during CMS malfunctions, associated repairs, required quality assurance or control activities, or periods when emissions from organic liquids are not routed to the control device in data averages and calculations used to report emission or operating levels. Do not use such data in fulfilling a minimum data availability requirement, if applicable. You must use all of the data collected during all other periods, including periods of SSM, in assessing the operation of the control device.

§63.2378 How do I demonstrate continuous compliance with the emission limitations, operating limits, and work practice standards?

(a) You must demonstrate continuous compliance with each emission limitation, operating limit, and work practice standard in Tables 2 through 4 to this subpart that applies to you according to the methods specified in subpart SS of this part and in tables 8 through 10 to this subpart, as applicable.

(b) You must follow the requirements in §63.6(e)(1) and (3) during periods of startup, shutdown, malfunction, or nonoperation of the affected source or any part thereof. In addition, the provisions of paragraphs (b)(1) through (3) of this section apply.

(1) The emission limitations in this subpart apply at all times except during periods of nonoperation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies. The emission limitations of this subpart apply during periods of SSM, except as provided in paragraphs (b)(2) and (3) of this section. However, if a SSM, or period of nonoperation of one portion of the affected source does not affect the ability of a particular emission source to comply with the emission limitations to which it is subject, then that emission source is still required to comply with the applicable emission limitations of this subpart during the startup, shutdown, malfunction, or period of nonoperation.

(2) The owner or operator must not shut down control devices or monitoring systems that are required or utilized for achieving compliance with this subpart during periods of SSM while emissions are being routed to such items of equipment if the shutdown would contravene requirements of this subpart applicable to such items of equipment. This paragraph (b)(2) does not apply if the item of equipment is

malfunctioning. This paragraph (b)(2) also does not apply if the owner or operator shuts down the compliance equipment (other than monitoring systems) to avoid damage due to a contemporaneous SSM of the affected source or portion thereof. If the owner or operator has reason to believe that monitoring equipment would be damaged due to a contemporaneous SSM of the affected source of portion thereof, the owner or operator must provide documentation supporting such a claim in the next Compliance report required in table 11 to this subpart, item 1. Once approved by the Administrator, the provision for ceasing to collect, during a SSM, monitoring data that would otherwise be required by the provisions of this subpart must be incorporated into the SSM plan.

(3) During SSM, you must implement, to the extent reasonably available, measures to prevent or minimize excess emissions. For purposes of this paragraph (b)(3), the term “excess emissions” means emissions greater than those allowed by the emission limits that apply during normal operational periods. The measures to be taken must be identified in the SSM plan, and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the affected source. Back-up control devices are not required, but may be used if available.

(c) Periods of planned routine maintenance of a control device used to control storage tanks or transfer racks, during which the control device does not meet the emission limits in table 2 to this subpart, must not exceed 240 hours per year.

(d) If you elect to route emissions from storage tanks or transfer racks to a fuel gas system or to a process, as allowed by §63.982(d), to comply with the emission limits in table 2 to this subpart, the total aggregate amount of time during which the emissions bypass the fuel gas system or process during the calendar year without being routed to a control device, for all reasons (except SSM or product changeovers of flexible operation units and periods when a storage tank has been emptied and degassed), must not exceed 240 hours.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 20463, Apr. 20, 2006]

Notifications, Reports, and Records

§63.2382 What notifications must I submit and when and what information should be submitted?

(a) You must submit each notification in subpart SS of this part, table 12 to this subpart, and paragraphs (b) through (d) of this section that applies to you. You must submit these notifications according to the schedule in table 12 to this subpart and as specified in paragraphs (b) through (d) of this section.

(b)(1) *Initial Notification.* If you startup your affected source before February 3, 2004, you must submit the Initial Notification no later than 120 calendar days after February 3, 2004.

(2) If you startup your new or reconstructed affected source on or after February 3, 2004, you must submit the Initial Notification no later than 120 days after initial startup.

(c) If you are required to conduct a performance test, you must submit the Notification of Intent to conduct the test at least 60 calendar days before it is initially scheduled to begin as required in §63.7(b)(1).

(d)(1) *Notification of Compliance Status.* If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in table 5, 6, or 7 to this subpart, you must submit a Notification of Compliance Status.

(2) The Notification of Compliance Status must include the information required in §63.999(b) and in paragraphs (d)(2)(i) through (viii) of this section.

(i) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify organic HAP emissions from the affected source.

(ii) The results of emissions profiles, performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to tables 6 and 7 to this subpart. For performance tests, results must include descriptions of sampling and analysis procedures and quality assurance procedures.

(iii) Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels you establish.

(iv) Descriptions of worst-case operating and/or testing conditions for the control device(s).

(v) Identification of emission sources subject to overlapping requirements described in §63.2396 and the authority under which you will comply.

(vi) The applicable information specified in §63.1039(a)(1) through (3) for all pumps and valves subject to the work practice standards for equipment leak components in table 4 to this subpart, item 4.

(vii) If you are complying with the vapor balancing work practice standard for transfer racks according to table 4 to this subpart, item 3.a, include a statement to that effect and a statement that the pressure vent settings on the affected storage tanks are greater than or equal to 2.5 psig.

(viii) The information specified in §63.2386(c)(10)(i), unless the information has already been submitted with the first Compliance report. If the information specified in §63.2386(c)(10)(i) has already been submitted with the first Compliance report, the information specified in §63.2386(d)(3) and (4), as applicable, shall be submitted instead.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006]

§63.2386 What reports must I submit and when and what information is to be submitted in each?

(a) You must submit each report in subpart SS of this part, Table 11 to this subpart, table 12 to this subpart, and in paragraphs (c) through (e) of this section that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report according to table 11 to this subpart and by the dates shown in paragraphs (b)(1) through (3) of this section, by the dates shown in subpart SS of this part, and by the dates shown in table 12 to this subpart, whichever are applicable.

(1)(i) The first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.2342 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your affected source in §63.2342.

(ii) The first Compliance report must be postmarked no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.2342.

(2)(i) Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(ii) Each subsequent Compliance report must be postmarked no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(3) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) and (2) of this section.

(c) *First Compliance report.* The first Compliance report must contain the information specified in paragraphs (c)(1) through (10) of this section.

(1) Company name and address.

(2) Statement by a responsible official, including the official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

(3) Date of report and beginning and ending dates of the reporting period.

(4) Any changes to the information listed in §63.2382(d)(2) that have occurred since the submittal of the Notification of Compliance Status.

(5) If you had a SSM during the reporting period and you took actions consistent with your SSM plan, the Compliance report must include the information described in §63.10(d)(5)(i).

(6) If there are no deviations from any emission limitation or operating limit that applies to you and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations, operating limits, or work practice standards during the reporting period.

(7) If there were no periods during which the CMS was out of control as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out of control during the reporting period.

(8) For closed vent systems and control devices used to control emissions, the information specified in paragraphs (c)(8)(i) and (ii) of this section for those planned routine maintenance activities that would require the control device to not meet the applicable emission limit.

(i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(ii) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description must include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the applicable emission limit due to planned routine maintenance.

(9) A listing of all transport vehicles into which organic liquids were loaded at transfer racks that are subject to control based on the criteria specified in table 2 to this subpart, items 7 through 10, during the previous 6 months for which vapor tightness documentation as required in §63.2390(c) was not on file at the facility.

(10)(i) A listing of all transfer racks (except those racks at which only unloading of organic liquids occurs) and of tanks greater than or equal to 18.9 cubic meters (5,000 gallons) that are part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart.

(ii) If the information specified in paragraph (c)(10)(i) of this section has already been submitted with the Notification of Compliance Status, the information specified in paragraphs (d)(3) and (4) of this section, as applicable, shall be submitted instead.

(d) *Subsequent Compliance reports.* Subsequent Compliance reports must contain the information in paragraphs (c)(1) through (9) of this section and, where applicable, the information in paragraphs (d)(1) through (4) of this section.

(1) For each deviation from an emission limitation occurring at an affected source where you are using a CMS to comply with an emission limitation in this subpart, you must include in the Compliance report the applicable information in paragraphs (d)(1)(i) through (xii) of this section. This includes periods of SSM.

(i) The date and time that each malfunction started and stopped.

(ii) The dates and times that each CMS was inoperative, except for zero (low-level) and high-level checks.

(iii) For each CMS that was out of control, the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of SSM, or during another period.

(v) A summary of the total duration of the deviations during the reporting period, and the total duration as a percentage of the total emission source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(vii) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percentage of the total emission source operating time during that reporting period.

(viii) An identification of each organic HAP that was potentially emitted during each deviation based on the known organic HAP contained in the liquid(s).

(ix) A brief description of the emission source(s) at which the CMS deviation(s) occurred.

(x) A brief description of each CMS that was out of control during the period.

(xi) The date of the latest certification or audit for each CMS.

(xii) A brief description of any changes in CMS, processes, or controls since the last reporting period.

(2) Include in the Compliance report the information in paragraphs (d)(2)(i) through (iii) of this section, as applicable.

(i) For each storage tank and transfer rack subject to control requirements, include periods of planned routine maintenance during which the control device did not comply with the applicable emission limits in table 2 to this subpart.

(ii) For each storage tank controlled with a floating roof, include a copy of the inspection record (required in §63.1065(b)) when inspection failures occur.

(iii) If you elect to use an extension for a floating roof inspection in accordance with §63.1063(c)(2)(iv)(B) or (e)(2), include the documentation required by those paragraphs.

(3)(i) A listing of any storage tank that became subject to controls based on the criteria for control specified in table 2 to this subpart, items 1 through 6, since the filing of the last Compliance report.

(ii) A listing of any transfer rack that became subject to controls based on the criteria for control specified in table 2 to this subpart, items 7 through 10, since the filing of the last Compliance report.

(4)(i) A listing of tanks greater than or equal to 18.9 cubic meters (5,000 gallons) that became part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart, since the last Compliance report.

(ii) A listing of all transfer racks (except those racks at which only the unloading of organic liquids occurs) that became part of the affected source but are not subject to any of the emission limitations, operating limits, or work practice standards of this subpart, since the last Compliance report.

(e) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to table 11 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission limitation in this subpart, we will consider submission of the Compliance report as satisfying any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report will not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the applicable title V permitting authority.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006]

§63.2390 What records must I keep?

(a) For each emission source identified in §63.2338 that does not require control under this subpart, you must keep all records identified in §63.2343.

(b) For each emission source identified in §63.2338 that does require control under this subpart:

(1) You must keep all records identified in subpart SS of this part and in table 12 to this subpart that are applicable, including records related to notifications and reports, SSM, performance tests, CMS, and performance evaluation plans; and

(2) You must keep the records required to show continuous compliance, as required in subpart SS of this part and in tables 8 through 10 to this subpart, with each emission limitation, operating limit, and work practice standard that applies to you.

(c) For each transport vehicle into which organic liquids are loaded at a transfer rack that is subject to control based on the criteria specified in table 2 to this subpart, items 7 through 10, you must keep the applicable records in paragraphs (c)(1) and (2) of this section or alternatively the verification records in paragraph (c)(3) of this section.

(1) For transport vehicles equipped with vapor collection equipment, the documentation described in 40 CFR 60.505(b), except that the test title is: Transport Vehicle Pressure Test-EPA Reference Method 27.

(2) For transport vehicles without vapor collection equipment, current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR part 180 for cargo tanks or 49 CFR 173.31 for tank cars.

(3) In lieu of keeping the records specified in paragraph (c)(1) or (2) of this section, as applicable, the owner or operator shall record that the verification of U.S. DOT tank certification or Method 27 of appendix A to 40 CFR part 60 testing, required in table 5 to this subpart, item 2, has been performed. Various methods for the record of verification can be used, such as: A check-off on a log sheet, a list of U.S. DOT serial numbers or Method 27 data, or a position description for gate security showing that the security guard will not allow any trucks on site that do not have the appropriate documentation.

(d) You must keep records of the total actual annual facility-level organic liquid loading volume as defined in §63.2406 through transfer racks to document the applicability, or lack thereof, of the emission limitations in table 2 to this subpart, items 7 through 10.

(e) An owner or operator who elects to comply with §63.2346(a)(4) shall keep the records specified in paragraphs (e)(1) through (3) of this section.

(1) A record of the U.S. DOT certification required by §63.2346(a)(4)(ii).

(2) A record of the pressure relief vent setting specified in §63.2346(a)(4)(v).

(3) If complying with §63.2346(a)(4)(vi)(B), keep the records specified in paragraphs (e)(3)(i) and (ii) of this section.

(i) A record of the equipment to be used and the procedures to be followed when reloading the cargo tank or tank car and displacing vapors to the storage tank from which the liquid originates.

(ii) A record of each time the vapor balancing system is used to comply with §63.2346(a)(4)(vi)(B).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42910, July 28, 2006; 73 FR 40982, July 17, 2008]

§63.2394 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form at a separate location.

(b) As specified in §63.10(b)(1), you must keep your files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You may keep the records off site for the remaining 3 years.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42911, July 28, 2006]

Other Requirements and Information

§63.2396 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?

(a) *Compliance with other regulations for storage tanks.* (1) After the compliance dates specified in §63.2342, you are in compliance with the provisions of this subpart for any storage tank that is assigned to the OLD affected source and that is both controlled with a floating roof and is in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, except that records shall be kept for 5 years rather than 2 years for storage tanks that are assigned to the OLD affected source.

(2) After the compliance dates specified in §63.2342, you are in compliance with the provisions of this subpart for any storage tank with a fixed roof that is assigned to the OLD affected source and that is both controlled with a closed vent system and control device and is in compliance with either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, except that you must comply with the monitoring, recordkeeping, and reporting requirements in this subpart.

(3) As an alternative to paragraphs (a)(1) and (2) of this section, if a storage tank assigned to the OLD affected source is subject to control under 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, you may elect to comply only with the requirements of this subpart for storage tanks meeting the applicability criteria for control in table 2 to this subpart.

(b) *Compliance with other regulations for transfer racks.* After the compliance dates specified in §63.2342, if you have a transfer rack that is subject to 40 CFR part 61, subpart BB, and that transfer rack is in OLD operation, you must meet all of the requirements of this subpart for that transfer rack when the transfer rack is in OLD operation during the loading of organic liquids.

(c) *Compliance with other regulations for equipment leak components.* (1) After the compliance dates specified in §63.2342, if you have pumps, valves, or sampling connections that are subject to a 40 CFR part 60 subpart, and those pumps, valves, and sampling connections are in OLD operation and in organic liquids service, as defined in this subpart, you must comply with the provisions of each subpart for those equipment leak components.

(2) After the compliance dates specified in §63.2342, if you have pumps, valves, or sampling connections subject to 40 CFR part 63, subpart GGG, and those pumps, valves, and sampling connections are in OLD operation and in organic liquids service, as defined in this subpart, you may elect to comply with the provisions of this subpart for all such equipment leak components. You must identify in the Notification of Compliance Status required by §63.2382(b) the provisions with which you will comply.

(d) [Reserved]

(e) *Overlap with other regulations for monitoring, recordkeeping, and reporting*—(1) *Control devices.* After the compliance dates specified in §63.2342, if any control device subject to this subpart is also subject to monitoring, recordkeeping, and reporting requirements of another 40 CFR part 63 subpart, the owner or operator must be in compliance with the monitoring, recordkeeping, and reporting requirements of this subpart EEEE. If complying with the monitoring, recordkeeping, and reporting requirements of the other subpart satisfies the monitoring, recordkeeping, and reporting requirements of this subpart, the owner or operator may elect to continue to comply with the monitoring, recordkeeping, and reporting requirements of the other subpart. In such instances, the owner or operator will be deemed to be in compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. The owner or operator must identify the other subpart being complied with in the Notification of Compliance Status required by §63.2382(b).

(2) *Equipment leak components.* After the compliance dates specified in §63.2342, if you are applying the applicable recordkeeping and reporting requirements of another 40 CFR part 63 subpart to the valves, pumps, and sampling connection systems associated with a transfer rack subject to this subpart that only unloads organic liquids directly to or via pipeline to a non-tank process unit component or to a storage tank subject to the other 40 CFR part 63 subpart, the owner or operator must be in compliance with the recordkeeping and reporting requirements of this subpart EEEE. If complying with the recordkeeping and reporting requirements of the other subpart satisfies the recordkeeping and reporting requirements of this subpart, the owner or operator may elect to continue to comply with the recordkeeping and reporting requirements of the other subpart. In such instances, the owner or operator will be deemed to be in compliance with the recordkeeping and reporting requirements of this subpart. The owner or operator must identify the other subpart being complied with in the Notification of Compliance Status required by §63.2382(b).

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42911, July 28, 2006]

§63.2398 What parts of the General Provisions apply to me?

Table 12 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§63.2402 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. Environmental Protection Agency (U.S. EPA) or a delegated authority such as your State, local, or eligible tribal agency. If the EPA Administrator has delegated authority to your State, local, or eligible tribal agency, then that agency, as well as the EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office (see list in §63.13) to find out if this subpart is delegated to your State, local, or eligible tribal agency.

(b) In delegating implementation and enforcement authority for this subpart to a State, local, or eligible tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the EPA Administrator and are not delegated to the State, local, or eligible tribal agency.

(1) Approval of alternatives to the nonopacity emission limitations, operating limits, and work practice standards in §63.2346(a) through (c) under §63.6(g).

(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42911, July 28, 2006]

§63.2406 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in §63.2, 40 CFR part 63, subparts H, PP, SS, TT, UU, and WW, and in this section. If the same term is defined in another subpart and in this section, it will have the meaning given in this section for purposes of this subpart. Notwithstanding the introductory language in §63.921, the terms “container” and “safety device” shall have the meaning found in this subpart and not in §63.921.

Actual annual average temperature, for organic liquids, means the temperature determined using the following methods:

(1) For heated or cooled storage tanks, use the calculated annual average temperature of the stored organic liquid as determined from a design analysis of the storage tank.

(2) For ambient temperature storage tanks:

(i) Use the annual average of the local (nearest) normal daily mean temperatures reported by the National Climatic Data Center; or

(ii) Use any other method that the EPA approves.

Annual average true vapor pressure means the equilibrium partial pressure exerted by the total table 1 organic HAP in the stored or transferred organic liquid. For the purpose of determining if a liquid meets the definition of an organic liquid, the vapor pressure is determined using standard conditions of 77 degrees F and 29.92 inches of mercury. For the purpose of determining whether an organic liquid meets the applicability criteria in table 2, items 1 through 6, to this subpart, use the actual annual average temperature as defined in this subpart. The vapor pressure value in either of these cases is determined:

(1) In accordance with methods described in American Petroleum Institute Publication 2517, Evaporative Loss from External Floating-Roof Tanks (incorporated by reference, see §63.14);

(2) Using standard reference texts;

(3) By the American Society for Testing and Materials Method D2879-83, 96 (incorporated by reference, see §63.14); or

(4) Using any other method that the EPA approves.

Bottoms receiver means a tank that collects distillation bottoms before the stream is sent for storage or for further processing downstream.

Cargo tank means a liquid-carrying tank permanently attached and forming an integral part of a motor vehicle or truck trailer. This term also refers to the entire cargo tank motor vehicle or trailer. For the purpose of this subpart, vacuum trucks used exclusively for maintenance or spill response are not considered cargo tanks.

Closed vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapors from an emission point to a control device. This system does not include the vapor collection system that is part of some transport vehicles or the loading arm or hose that is used for vapor return. For transfer racks, the closed vent system begins at, and includes, the first block valve on the downstream side of the loading arm or hose used to convey displaced vapors.

Combustion device means an individual unit of equipment, such as a flare, oxidizer, catalytic oxidizer, process heater, or boiler, used for the combustion of organic emissions.

Container means a portable unit in which a material can be stored, transported, treated, disposed of, or otherwise handled. Examples of containers include, but are not limited to, drums and portable cargo containers known as “portable tanks” or “totes.”

Control device means any combustion device, recovery device, recapture device, or any combination of these devices used to comply with this subpart. Such equipment or devices include, but are not limited to, absorbers, adsorbers, condensers, and combustion devices. Primary condensers, steam strippers, and fuel gas systems are not considered control devices.

Crude oil means any of the naturally occurring liquids commonly referred to as crude oil, regardless of specific physical properties. Only those crude oils downstream of the first point of custody transfer after the production field are considered crude oils in this subpart.

Custody transfer means the transfer of hydrocarbon liquids after processing and/or treatment in the producing operations, or from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

Design evaluation means a procedure for evaluating control devices that complies with the requirements in §63.985(b)(1)(i).

Deviation means any instance in which an affected source subject to this subpart, or portion thereof, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit) or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart, and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during SSM.

Emission limitation means an emission limit, opacity limit, operating limit, or visible emission limit.

Equipment leak component means each pump, valve, and sampling connection system used in organic liquids service at an OLD operation. Valve types include control, globe, gate, plug, and ball. Relief and check valves are excluded.

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals (4.0 pounds per square inch absolute (psia)) or greater which is used as a fuel for internal combustion engines. Aviation gasoline is included in this definition.

High throughput transfer rack means those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) a total of 11.8 million liters per year or greater of organic liquids.

In organic liquids service means that an equipment leak component contains or contacts organic liquids having 5 percent by weight or greater of the organic HAP listed in Table 1 to this subpart.

Low throughput transfer rack means those transfer racks that transfer into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) less than 11.8 million liters per year of organic liquids.

On-site or *on site* means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source to which the records pertain, storage in central files elsewhere at the major source, or electronically available at the site.

Organic liquid means:

(1) Any non-crude oil liquid or liquid mixture that contains 5 percent by weight or greater of the organic HAP listed in Table 1 to this subpart, as determined using the procedures specified in §63.2354(c).

(2) Any crude oils downstream of the first point of custody transfer.

(3) Organic liquids for purposes of this subpart do not include the following liquids:

(i) Gasoline (including aviation gasoline), kerosene (No. 1 distillate oil), diesel (No. 2 distillate oil), asphalt, and heavier distillate oils and fuel oils;

(ii) Any fuel consumed or dispensed on the plant site directly to users (such as fuels for fleet refueling or for refueling marine vessels that support the operation of the plant);

(iii) Hazardous waste;

(iv) Wastewater;

(v) Ballast water: or

(vi) Any non-crude oil liquid with an annual average true vapor pressure less than 0.7 kilopascals (0.1 psia).

Organic liquids distribution (OLD) operation means the combination of activities and equipment used to store or transfer organic liquids into, out of, or within a plant site regardless of the specific activity being performed. Activities include, but are not limited to, storage, transfer, blending, compounding, and packaging.

Permitting authority means one of the following:

(1) The State Air Pollution Control Agency, local agency, or other agency authorized by the EPA Administrator to carry out a permit program under 40 CFR part 70; or

(2) The EPA Administrator, in the case of EPA-implemented permit programs under title V of the CAA (42 U.S.C. 7661) and 40 CFR part 71.

Plant site means all contiguous or adjoining surface property that is under common control, including surface properties that are separated only by a road or other public right-of-way. Common control includes surface properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination.

Research and development facility means laboratory and pilot plant operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and which are not engaged in the manufacture of products for commercial sale, except in a *de minimis* manner.

Responsible official means responsible official as defined in 40 CFR 70.2 and 40 CFR 71.2, as applicable.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device that functions exclusively to prevent physical damage or permanent deformation to

a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event.

Shutdown means the cessation of operation of an OLD affected source, or portion thereof (other than as part of normal operation of a batch-type operation), including equipment required or used to comply with this subpart, or the emptying and degassing of a storage tank. Shutdown as defined here includes, but is not limited to, events that result from periodic maintenance, replacement of equipment, or repair.

Startup means the setting in operation of an OLD affected source, or portion thereof (other than as part of normal operation of a batch-type operation), for any purpose. Startup also includes the placing in operation of any individual piece of equipment required or used to comply with this subpart including, but not limited to, control devices and monitors.

Storage tank means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, or reinforced plastic) that provide structural support and is designed to hold a bulk quantity of liquid. Storage tanks do not include:

(1) Units permanently attached to conveyances such as trucks, trailers, rail cars, barges, or ships;

(2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;

(3) Bottoms receivers;

(4) Surge control vessels;

(5) Vessels storing wastewater; or

(6) Reactor vessels associated with a manufacturing process unit.

Surge control vessel means feed drums, recycle drums, and intermediate vessels. Surge control vessels are used within chemical manufacturing processes when in-process storage, mixing, or management of flow rates or volumes is needed to assist in production of a product.

Tank car means a car designed to carry liquid freight by rail, and including a permanently attached tank.

Total actual annual facility-level organic liquid loading volume means the total facility-level actual volume of organic liquid loaded for transport within or out of the facility through transfer racks that are part of the affected source into transport vehicles (for existing affected sources) or into transport vehicles and containers (for new affected sources) based on a 3-year rolling average, calculated annually.

(1) For existing affected sources, each 3-year rolling average is based on actual facility-level loading volume during each calendar year (January 1 through December 31) in the 3-year period. For calendar

year 2004 only (the first year of the initial 3-year rolling average), if an owner or operator of an affected source does not have actual loading volume data for the time period from January 1, 2004, through February 2, 2004 (the time period prior to the effective date of the OLD NESHAP), the owner or operator shall compute a facility-level loading volume for this time period as follows: At the end of the 2004 calendar year, the owner or operator shall calculate a daily average facility-level loading volume (based on the actual loading volume for February 3, 2004, through December 31, 2004) and use that daily average to estimate the facility-level loading volume for the period of time from January 1, 2004, through February 2, 2004. The owner or operator shall then sum the estimated facility-level loading volume from January 1, 2004, through February 2, 2004, and the actual facility-level loading volume from February 3, 2004, through December 31, 2004, to calculate the annual facility-level loading volume for calendar year 2004.

(2)(i) For new affected sources, the 3-year rolling average is calculated as an average of three 12-month periods. An owner or operator must select as the beginning calculation date with which to start the calculations as either the initial startup date of the new affected source or the first day of the calendar month following the month in which startup occurs. Once selected, the date with which the calculations begin cannot be changed.

(ii) The initial 3-year rolling average is based on the projected maximum facility-level annual loading volume for each of the 3 years following the selected beginning calculation date. The second 3-year rolling average is based on actual facility-level loading volume for the first year of operation plus a new projected maximum facility-level annual loading volume for second and third years following the selected beginning calculation date. The third 3-year rolling average is based on actual facility-level loading volume for the first 2 years of operation plus a new projected maximum annual facility-level loading volume for the third year following the beginning calculation date. Subsequent 3-year rolling averages are based on actual facility-level loading volume for each year in the 3-year rolling average.

Transfer rack means a single system used to load organic liquids into, or unload organic liquids out of, transport vehicles or containers. It includes all loading and unloading arms, pumps, meters, shutoff valves, relief valves, and other piping and equipment necessary for the transfer operation. Transfer equipment and operations that are physically separate (i.e., do not share common piping, valves, and other equipment) are considered to be separate transfer racks.

Transport vehicle means a cargo tank or tank car.

Vapor balancing system means:

(1) A piping system that collects organic HAP vapors displaced from transport vehicles or containers during loading and routes the collected vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. For containers, the piping system must route the displaced vapors directly to the appropriate storage tank or to another storage tank connected to a common header in order to qualify as a vapor balancing system; or

(2) A piping system that collects organic HAP vapors displaced from the loading of a storage tank and routes the collected vapors to the transport vehicle from which the storage tank is filled.

Vapor collection system means any equipment located at the source (i.e., at the OLD operation) that is not open to the atmosphere; that is composed of piping, connections, and, if necessary, flow-inducing devices; and that is used for:

(1) Containing and conveying vapors displaced during the loading of transport vehicles to a control device;

(2) Containing and directly conveying vapors displaced during the loading of containers; or

(3) Vapor balancing. This does not include any of the vapor collection equipment that is installed on the transport vehicle.

Vapor-tight transport vehicle means a transport vehicle that has been demonstrated to be vapor-tight. To be considered vapor-tight, a transport vehicle equipped with vapor collection equipment must undergo a pressure change of no more than 250 pascals (1 inch of water) within 5 minutes after it is pressurized to 4,500 pascals (18 inches of water). This capability must be demonstrated annually using the procedures specified in EPA Method 27 of 40 CFR part 60, appendix A. For all other transport vehicles, vapor tightness is demonstrated by performing the U.S. DOT pressure test procedures for tank cars and cargo tanks.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42911, July 28, 2006]

Table 1 to Subpart EEEE of Part 63—Organic Hazardous Air Pollutants

You must use the organic HAP information listed in the following table to determine which of the liquids handled at your facility meet the HAP content criteria in the definition of Organic Liquid in §63.2406.

Compound name	**CAS No.**[1]
2,4-D salts and esters	94-75-7
Acetaldehyde	75-07-0
Acetonitrile	75-05-8
Acetophenone	98-86-2

Acrolein	107-02-8
Acrylamide	79-06-1
Acrylic acid	79-10-7
Acrylonitrile	107-13-1
Allyl chloride	107-05-1
Aniline	62-53-3
Benzene	71-43-2
Biphenyl	92-52-4
Butadiene (1,3-)	106-99-0
Carbon tetrachloride	56-23-5
Chloroacetic acid	79-11-8
Chlorobenzene	108-90-7
2-Chloro-1,3-butadiene (Chloroprene)	126-99-8
Chloroform	67-66-3
m-Cresol	108-39-4
o-Cresol	95-48-7
p-Cresol	106-44-5
Cresols/cresylic acid	1319-77-3
Cumene	98-82-8

Dibenzofurans	132-64-9
Dibutylphthalate	84-74-2
Dichloroethane (1,2-) (Ethylene dichloride) (EDC)	107-06-2
Dichloropropene (1,3-)	542-75-6
Diethanolamine	111-42-2
Diethyl aniline (N,N-)	121-69-7
Diethylene glycol monobutyl ether	112-34-5
Diethylene glycol monomethyl ether	111-77-3
Diethyl sulfate	64-67-5
Dimethyl formamide	68-12-2
Dimethylhydrazine (1,1-)	57-14-7
Dioxane (1,4-) (1,4-Diethyleneoxide)	123-91-1
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106-89-8
Epoxybutane (1,2-)	106-88-7
Ethyl acrylate	140-88-5
Ethylbenzene	100-41-4
Ethyl chloride (Chloroethane)	75-00-3
Ethylene dibromide (Dibromomethane)	106-93-4
Ethylene glycol	107-21-1

Ethylene glycol dimethyl ether	110-71-4
Ethylene glycol monomethyl ether	109-86-4
Ethylene glycol monomethyl ether acetate	110-49-6
Ethylene glycol monophenyl ether	122-99-6
Ethylene oxide	75-21-8
Ethylidene dichloride (1,1-Dichloroethane)	75-34-3
Formaldehyde	50-00-0
Hexachloroethane	67-72-1
Hexane	110-54-3
Hydroquinone	123-31-9
Isophorone	78-59-1
Maleic anhydride	108-31-6
Methanol	67-56-1
Methyl chloride (Chloromethane)	74-87-3
Methylene chloride (Dichloromethane)	75-09-2
Methylenedianiline (4,4’-)	101-77-9
Methylene diphenyl diisocyanate	101-68-8
Methyl hydrazine	60-34-4
Methyl isobutyl ketone (Hexone) (MIBK)	108-10-1

Methyl methacrylate	80-62-6
Methyl tert-butyl ether (MTBE)	1634-04-4
Naphthalene	91-20-3
Nitrobenzene	98-95-3
Phenol	108-9-52
Phthalic anhydride	85-44-9
Polycyclic organic matter	50-32-8
Propionaldehyde	123-38-6
Propylene dichloride (1,2-Dichloropropane)	78-87-5
Propylene oxide	75-56-9
Quinoline	91-22-5
Styrene	100-42-5
Styrene oxide	96-09-3
Tetrachloroethane (1,1,2,2-)	79-34-5
Tetrachloroethylene (Perchloroethylene)	127-18-4
Toluene	108-88-3
Toluene diisocyanate (2,4-)	584-84-9
o-Toluidine	95-53-4
Trichlorobenzene (1,2,4-)	120-82-1

Trichloroethane (1,1,1-) (Methyl chloroform)	71-55-6
Trichloroethane (1,1,2-) (Vinyl trichloride)	79-00-5
Trichloroethylene	79-01-6
Triethylamine	121-44-8
Trimethylpentane (2,2,4-)	540-84-1
Vinyl acetate	108-05-4
Vinyl chloride (Chloroethylene)	75-01-4
Vinylidene chloride (1,1-Dichloroethylene)	75-35-4
Xylene (m-)	108-38-3
Xylene (o-)	95-47-6
Xylene (p-)	106-42-3
Xylenes (isomers and mixtures)	1330-20-7

[1]CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42913, July 28, 2006]

Table 2 to Subpart EEEE of Part 63—Emission Limits

As stated in §63.2346, you must comply with the emission limits for the organic liquids distribution emission sources as follows:

If you own or operate . . .	**And if . . .**	**Then you must . . .**
1. A storage tank at an existing affected source with a capacity ≥18.9 cubic meters (5,000 gallons) and <189.3 cubic	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1	i. Reduce emissions of total organic HAP (or, upon approval, TOC) by at least 95 weight-percent or, as an option, to an exhaust concentration less than or equal to

meters (50,000 gallons).	organic HAP in the stored organic liquid is ≥27.6 kilopascals (4.0 psia) and <76.6 kilopascals (11.1 psia).	20 ppmv, on a dry basis corrected to 3 percent oxygen for combustion devices using supplemental combustion air, by venting emissions through a closed vent system to any combination of control devices meeting the applicable requirements of 40 CFR part 63, subpart SS; OR
		ii. Comply with the work practice standards specified in table 4 to this subpart, items 1.a, 1.b, or 1.c for tanks storing liquids described in that table.
	b. The stored organic liquid is crude oil.	i. See the requirement in item 1.a.i or 1.a.ii of this table.
2. A storage tank at an existing affected source with a capacity ≥189.3 cubic meters (50,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is <76.6 kilopascals (11.1 psia).	i. See the requirement in item 1.a.i or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirement in item 1.a.i or 1.a.ii of this table.
3. A storage tank at a reconstructed or new affected source with a capacity ≥18.9 cubic meters (5,000 gallons) and <37.9 cubic meters (10,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is ≥27.6 kilopascals (4.0 psia) and <76.6 kilopascals (11.1 psia).	i. See the requirement in item 1.a.i or 1.a.ii of this table.
	b. The stored organic liquid	i. See the requirement in item 1.a.i or 1.a.ii

	is crude oil.	of this table.
4. A storage tank at a reconstructed or new affected source with a capacity ≥37.9 cubic meters (10,000 gallons) and <189.3 cubic meters (50,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is ≥0.7 kilopascals (0.1 psia) and <76.6 kilopascals (11.1 psia).	i. See the requirement in item 1.a.i or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirement in item 1.a.i or 1.a.ii of this table.
5. A storage tank at a reconstructed or new affected source with a capacity ≥189.3 cubic meters (50,000 gallons).	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is <76.6 kilopascals (11.1 psia).	i. See the requirement in item 1.a.i or 1.a.ii of this table.
	b. The stored organic liquid is crude oil.	i. See the requirement in item 1.a.i or 1.a.ii of this table.
6. A storage tank at an existing, reconstructed, or new affected source meeting the capacity criteria specified in table 2 of this subpart, items 1 through 5.	a. The stored organic liquid is not crude oil and if the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid is ≥76.6 kilopascals (11.1 psia).	i. Reduce emissions of total organic HAP (or, upon approval, TOC) by at least 95 weight-percent or, as an option, to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3 percent oxygen for combustion devices using supplemental combustion air, by venting emissions through a closed vent system to any combination of control devices meeting the applicable requirements of 40 CFR part 63, subpart SS; OR

		ii. Comply with the work practice standards specified in table 4 to this subpart, item 2.a, for tanks storing the liquids described in that table.
7. A transfer rack at an existing facility where the total actual annual facility-level organic liquid loading volume through transfer racks is equal to or greater than 800,000 gallons and less than 10 million gallons.	a. The total table 1 organic HAP content of the organic liquid being loaded through one or more of the transfer rack's arms is at least 98 percent by weight and is being loaded into a transport vehicle.	i. For all such loading arms at the rack, reduce emissions of total organic HAP (or, upon approval, TOC) from the loading of organic liquids either by venting the emissions that occur during loading through a closed vent system to any combination of control devices meeting the applicable requirements of 40 CFR part 63, subpart SS, achieving at least 98 weight-percent HAP reduction, OR, as an option, to an exhaust concentration less than or equal to 20 ppmv, on a dry basis corrected to 3 percent oxygen for combustion devices using supplemental combustion air; OR
		ii. During the loading of organic liquids, comply with the work practice standards specified in item 3 of table 4 to this subpart.
8. A transfer rack at an existing facility where the total actual annual facility-level organic liquid loading volume through transfer racks is ≥10 million gallons.	a. One or more of the transfer rack's arms is loading an organic liquid into a transport vehicle.	i. See the requirements in items 7.a.i and 7.a.ii of this table.
9. A transfer rack at a new facility where the total actual annual facility-level organic liquid loading volume through transfer racks is less than 800,000 gallons	a. The total Table 1 organic HAP content of the organic liquid being loaded through one or more of the transfer rack's arms is at least 25 percent by weight and is being loaded into a	i. See the requirements in items 7.a.i and 7.a.ii of this table.

	transport vehicle	
	b. One or more of the transfer rack's arms is filling a container with a capacity equal to or greater than 55 gallons	i. For all such loading arms at the rack during the loading of organic liquids, comply with the provisions of §§63.924 through 63.927 of 40 CFR part 63, Subpart PP—National Emission Standards for Containers, Container Level 3 controls; OR ii. During the loading of organic liquids, comply with the work practice standards specified in item 3.a of Table 4 to this subpart.
10. A transfer rack at a new facility where the total actual annual facility-level organic liquid loading volume through transfer racks is equal to or greater than 800,000 gallons.	a. One or more of the transfer rack's arms is loading an organic liquid into a transport vehicle.	i. See the requirements in items 7.a.i and 7.a.ii of this table.
	b. One or more of the transfer rack's arms is filling a container with a capacity equal to or greater than 55 gallons.	i. For all such loading arms at the rack during the loading of organic liquids, comply with the provisions of §§63.924 through 63.927 of 40 CFR part 63, Subpart PP—National Emission Standards for Containers, Container Level 3 controls; OR
		ii. During the loading of organic liquids, comply with the work practice standards specified in item 3.a of table 4 to this subpart.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42913, July 28, 2006; 73 FR 21830, Apr. 23, 2008]

Table 3 to Subpart EEEE of Part 63—Operating Limits—High Throughput Transfer Racks

As stated in §63.2346(e), you must comply with the operating limits for existing, reconstructed, or new affected sources as follows:

For each existing, each reconstructed, and each new	**You must . . .**

affected source using . . .	
1. A thermal oxidizer to comply with an emission limit in table 2 to this subpart	Maintain the daily average fire box or combustion zone temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
2. A catalytic oxidizer to comply with an emission limit in table 2 to this subpart	a. Replace the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	b. Maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	c. Maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
3. An absorber to comply with an emission limit in table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds in the absorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Maintain the daily average scrubbing liquid temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	Maintain the difference between the specific gravities of the saturated and fresh scrubbing fluids greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
4. A condenser to comply with an emission limit in table 2 to	a. Maintain the daily average concentration level of organic compounds at the condenser exit less than or equal to the reference concentration

this subpart	established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Maintain the daily average condenser exit temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
5. An adsorption system with adsorbent regeneration to comply with an emission limit in table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	Before the adsorption cycle commences, achieve and maintain the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	Achieve a pressure reduction during each adsorption bed regeneration cycle greater than or equal to the pressure reduction established during the design evaluation or performance test that demonstrated compliance with the emission limit.
6. An adsorption system without adsorbent regeneration to comply with an emission limit in table 2 to this subpart	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR
	b. Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the

	adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND
	Maintain the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
7. A flare to comply with an emission limit in table 2 to this subpart	a. Comply with the equipment and operating requirements in §63.987(a); AND b. Conduct an initial flare compliance assessment in accordance with §63.987(b); AND
	c. Install and operate monitoring equipment as specified in §63.987(c).
8. Another type of control device to comply with an emission limit in table 2 to this subpart	Submit a monitoring plan as specified in §§63.995(c) and 63.2366(b), and monitor the control device in accordance with that plan.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42914, July 28, 2006]

Table 4 to Subpart EEEE of Part 63—Work Practice Standards

As stated in §63.2346, you may elect to comply with one of the work practice standards for existing, reconstructed, or new affected sources in the following table. If you elect to do so, . . .

For each . . .	**You must . . .**
1. Storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and organic HAP vapor pressure criteria specified in table 2 to this subpart, items 1 through 5	a. Comply with the requirements of 40 CFR part 63, subpart WW (control level 2), if you elect to meet 40 CFR part 63, subpart WW (control level 2) requirements as an alternative to the emission limit in table 2 to this subpart, items 1 through 5; OR
	b. Comply with the requirements of §63.984 for routing emissions to a fuel gas system or back to a process; OR

	c. Comply with the requirements of §63.2346(a)(4) for vapor balancing emissions to the transport vehicle from which the storage tank is filled.
2. Storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and organic HAP vapor pressure criteria specified in table 2 to this subpart, item 6	a. Comply with the requirements of §63.984 for routing emissions to a fuel gas system or back to a process; OR b. Comply with the requirements of §63.2346(a)(4) for vapor balancing emissions to the transport vehicle from which the storage tank is filled.
3. Transfer rack subject to control based on the criteria specified in table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	a. If the option of a vapor balancing system is selected, install and, during the loading of organic liquids, operate a system that meets the requirements in table 7 to this subpart, item 3.b.i and item 3.b.ii, as applicable; OR
	b. Comply with the requirements of §63.984 during the loading of organic liquids, for routing emissions to a fuel gas system or back to a process.
4. Pump, valve, and sampling connection that operates in organic liquids service at least 300 hours per year at an existing, reconstructed, or new affected source	Comply with the requirements for pumps, valves, and sampling connections in 40 CFR part 63, subpart TT (control level 1), subpart UU (control level 2), or subpart H.
5. Transport vehicles equipped with vapor collection equipment that are loaded at transfer racks that are subject to control based on the criteria specified in table 2 to this subpart, items 7 through 10	Follow the steps in 40 CFR 60.502(e) to ensure that organic liquids are loaded only into vapor-tight transport vehicles, and comply with the provisions in 40 CFR 60.502(f), (g), (h), and (i), except substitute the term transport vehicle at each occurrence of tank truck or gasoline tank truck in those paragraphs.
6. Transport vehicles equipped without vapor collection equipment that are loaded at transfer racks that are subject to control based on the criteria specified in table 2 to this subpart, items 7 through 10	Ensure that organic liquids are loaded only into transport vehicles that have a current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR 180 (cargo tanks) or 49 CFR 173.31 (tank cars).

[71 FR 42915, July 28, 2006]

Table 5 to Subpart EEEE of Part 63—Requirements for Performance Tests and Design Evaluations

As stated in §§63.2354(a) and 63.2362, you must comply with the requirements for performance tests and design evaluations for existing, reconstructed, or new affected sources as follows:

For . . .	You must conduct . . .	According to . . .	Using . . .	To determine . . .	According to the following requirements . . .
1. Each existing, each reconstructed, and each new affected source using a nonflare control device to comply with an emission limit in Table 2 to this subpart, items 1 through 10	a. A performance test to determine the organic HAP (or, upon approval, TOC) control efficiency of each nonflare control device, OR the exhaust concentration of each combustion device; OR	i. §63.985(b)(1)(ii), §63.988(b), §63.990(b), or §63.995(b)	(1) EPA Method 1 or 1A in appendix A-1 of 40 CFR part 60, as appropriate	(A) Sampling port locations and the required number of traverse points	(i) Sampling sites must be located at the inlet and outlet of each control device if complying with the control efficiency requirement or at the outlet of the control device if complying with the exhaust concentration requirement; AND (ii) the outlet sampling site must be located at each control device prior to any releases to the atmosphere.
			(2) EPA Method 2, 2A, 2C, 2D, or 2F in appendix A-1 of 40 CFR part 60, or EPA Method 2G in appendix A-2 of 40 CFR part 60, as	(A) Stack gas velocity and volumetric flow rate	See the requirements in items 1.a.i.(1)(A)(i) and (ii) of this table.

			appropriate		
			(3) EPA Method 3 or 3B in appendix A-2 of 40 CFR part 60, as appropriate	(A) Concentration of CO_2 and O_2 and dry molecular weight of the stack gas	See the requirements in items 1.a.i.(1)(A)(i) and (ii) of this table.
			(4) EPA Method 4 in appendix A-3 of 40 CFR part 60	(A) Moisture content of the stack gas	See the requirements in items 1.a.i.(1)(A)(i) and (ii) of this table.
			(5) EPA Method 18 in appendix A-6 of 40 CFR part 60, or EPA Method 25 or 25A in appendix A-7 of 40 CFR part 60, as appropriate, or EPA Method 316 in appendix A of 40 CFR part 63 for measuring form-aldehyde	(A) Total organic HAP (or, upon approval, TOC), or formaldehyde emissions	(i) The organic HAP used for the calibration gas for EPA Method 25A in appendix A-7 of 40 CFR part 60 must be the single organic HAP representing the largest percent by volume of emissions; AND (ii) During the performance test, you must establish the operating parameter limits within which total organic HAP (or, upon approval, TOC) emissions are reduced by the required weight-percent or, as an

					option for nonflare combustion devices, to 20 ppmv exhaust concentration.
	b. A design evaluation (for nonflare control devices) to determine the organic HAP (or, upon approval, TOC) control efficiency of each nonflare control device, or the exhaust concentration of each combustion control device	§63.985(b)(1)(i)			During a design evaluation, you must establish the operating parameter limits within which total organic HAP, (or, upon approval, TOC) emissions are reduced by at least 95 weight-percent for storage tanks or 98 weight-percent for transfer racks, or, as an option for nonflare combustion devices, to 20 ppmv exhaust concentration.
2. Each transport vehicle that you own that is equipped with vapor collection equipment and is loaded with organic liquids at a transfer rack that is subject to control based on the criteria	A performance test to determine the vapor tightness of the tank and then repair as needed until it passes the test.		EPA Method 27 in appendix A of 40 CFR part 60	Vapor tightness	The pressure change in the tank must be no more than 250 pascals (1 inch of water) in 5 minutes after it is pressurized to 4,500 pascals (18 inches of water).

specified in table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source					

[71 FR 42916, July 28, 2006, as amended at 73 FR 21831, Apr. 23, 2008]

Table 6 to Subpart EEEE of Part 63—Initial Compliance With Emission Limits

As stated in §§63.2370(a) and 63.2382(b), you must show initial compliance with the emission limits for existing, reconstructed, or new affected sources as follows:

For each . . .	**For the following emission limit . . .**	**You have demonstrated initial compliance if . . .**
1. Storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2 to this subpart, items 1 through 6	Reduce total organic HAP (or, upon approval, TOC) emissions by at least 95 weight-percent, or as an option for nonflare combustion devices to an exhaust concentration of ≤20 ppmv	Total organic HAP (or, upon approval, TOC) emissions, based on the results of the performance testing or design evaluation specified in Table 5 to this subpart, item 1.a or 1.b, respectively, are reduced by at least 95 weight-percent or as an option for nonflare combustion devices to an exhaust concentration ≤20 ppmv.
2. Transfer rack that is subject to control based on the criteria specified in table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	Reduce total organic HAP (or, upon approval, TOC) emissions from the loading of organic liquids by at least 98 weight-percent, or as an option for nonflare combustion devices to an exhaust concentration of ≤20 ppmv	Total organic HAP (or, upon approval, TOC) emissions from the loading of organic liquids, based on the results of the performance testing or design evaluation specified in table 5 to this subpart, item 1.a or 1.b, respectively, are reduced by at least 98 weight-percent or as an option for nonflare combustion devices to an exhaust concentration of ≤20 ppmv.

[71 FR 42918, July 28, 2006, as amended at 73 FR 21832, Apr. 23, 2008]

Table 7 to Subpart EEEE of Part 63—Initial Compliance With Work Practice Standards

For each . . .	If you . . .	You have demonstrated initial compliance if . . .
1. Storage tank at an existing affected source meeting either set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2 to this subpart, items 1 or 2	a. Install a floating roof or equivalent control that meets the requirements in Table 4 to this subpart, item 1.a	i. After emptying and degassing, you visually inspect each internal floating roof before the refilling of the storage tank and perform seal gap inspections of the primary and secondary rim seals of each external floating roof within 90 days after the refilling of the storage tank.
	b. Route emissions to a fuel gas system or back to a process	i. You meet the requirements in §63.984(b) and submit the statement of connection required by §63.984(c).
	c. Install and, during the filling of the storage tank with organic liquids, operate a vapor balancing system	i. You meet the requirements in §63.2346(a)(4).
2. Storage tank at a reconstructed or new affected source meeting any set of tank capacity and liquid organic HAP vapor pressure criteria specified in Table 2 to this subpart, items 3 through 5	a. Install a floating roof or equivalent control that meets the requirements in Table 4 to this subpart, item 1.a	i. You visually inspect each internal floating roof before the initial filling of the storage tank, and perform seal gap inspections of the primary and secondary rim seals of each external floating roof within 90 days after the initial filling of the storage tank.
	b. Route emissions to a fuel gas system or back to a process	i. See item 1.b.i of this table.
	c. Install and, during the filling of the storage tank with organic liquids, operate a vapor balancing system	i. See item 1.c.i of this table.

3. Transfer rack that is subject to control based on the criteria specified in table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	a. Load organic liquids only into transport vehicles having current vapor tightness certification as described in table 4 to this subpart, item 5 and item 6	i. You comply with the provisions specified in table 4 to this subpart, item 5 or item 6, as applicable.
	b. Install and, during the loading of organic liquids, operate a vapor balancing system	i. You design and operate the vapor balancing system to route organic HAP vapors displaced from loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. ii. You design and operate the vapor balancing system to route organic HAP vapors displaced from loading of organic liquids into containers directly (e.g., no intervening tank or containment area such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header.
	c. Route emissions to a fuel gas system or back to a process	i. See item 1.b.i of this table.
4. Equipment leak component, as defined in §63.2406, that operates in organic liquids service ≥300 hours per year at an existing, reconstructed, or new affected source	a. Carry out a leak detection and repair program or equivalent control according to one of the subparts listed in table 4 to this subpart, item 4.a	i. You specify which one of the control programs listed in table 4 to this subpart you have selected, OR ii. Provide written specifications for your equivalent control approach.

[71 FR 42918, July 28, 2006, as amended at 73 FR 21833, Apr. 23, 2008]

Table 8 to Subpart EEEE of Part 63—Continuous Compliance With Emission Limits

As stated in §§63.2378(a) and (b) and 63.2390(b), you must show continuous compliance with the emission limits for existing, reconstructed, or new affected sources according to the following table:

For each . . .	**For the following emission limit . . .**	**You must demonstrate continuous compliance by . . .**
1. Storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and liquid organic HAP vapor pressure criteria specified in table 2 to this subpart, items 1 through 6	a. Reduce total organic HAP (or, upon approval, TOC) emissions from the closed vent system and control device by 95 weight-percent or greater, or as an option to 20 ppmv or less of total organic HAP (or, upon approval, TOC) in the exhaust of combustion devices	i. Performing CMS monitoring and collecting data according to §§63.2366, 63.2374, and 63.2378; AND ii. Maintaining the operating limits established during the design evaluation or performance test that demonstrated compliance with the emission limit.
2. Transfer rack that is subject to control based on the criteria specified in table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source	a. Reduce total organic HAP (or, upon approval, TOC) emissions during the loading of organic liquids from the closed vent system and control device by 98 weight-percent or greater, or as an option to 20 ppmv or less of total organic HAP (or, upon approval, TOC) in the exhaust of combustion devices	i. Performing CMS monitoring and collecting data according to §§63.2366, 63.2374, and 63.2378 during the loading of organic liquids; AND ii. Maintaining the operating limits established during the design evaluation or performance test that demonstrated compliance with the emission limit during the loading of organic liquids.

[71 FR 42919, July 28, 2006]

Table 9 to Subpart EEEE of Part 63—Continuous Compliance With Operating Limits—High Throughput Transfer Racks

As stated in §§63.2378(a) and (b) and 63.2390(b), you must show continuous compliance with the operating limits for existing, reconstructed, or new affected sources according to the following table:

For each existing, reconstructed, and each new affected source using . . .	**For the following operating limit . . .**	**You must demonstrate continuous compliance by . . .**
1. A thermal oxidizer to comply with an emission limit in table 2 to this subpart.	a. Maintain the daily average fire box or combustion zone, as applicable, temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.	i. Continuously monitoring and recording fire box or combustion zone, as applicable, temperature every 15 minutes and maintaining the daily average fire box temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
2. A catalytic oxidizer to comply with an emission limit in table 2 to this subpart.	a. Replace the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND	i. Replacing the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND	i. Continuously monitoring and recording the temperature at the inlet of the catalyst bed at least every 15 minutes and maintaining the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required

		in §63.998.
	c. Maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.	i. Continuously monitoring and recording the temperature at the outlet of the catalyst bed every 15 minutes and maintaining the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
3. An absorber to comply with an emission limit in table 2 to this subpart.	a. Maintain the daily average concentration level of organic compounds in the absorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR	i. Continuously monitoring the organic concentration in the absorber exhaust and maintaining the daily average concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain the daily average scrubbing liquid temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND Maintain the difference between the specific gravities of the saturated and fresh scrubbing fluids greater than or equal to the difference established during the design evaluation or performance test that demonstrated	i. Continuously monitoring the scrubbing liquid temperature and maintaining the daily average temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Maintaining the difference between the specific gravities greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND iii. Keeping the applicable records required

	compliance with the emission limit.	in §63.998.
4. A condenser to comply with an emission limit in table 2 to this subpart.	a. Maintain the daily average concentration level of organic compounds at the exit of the condenser less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR	i. Continuously monitoring the organic concentration at the condenser exit and maintaining the daily average concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain the daily average condenser exit temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.	i. Continuously monitoring and recording the temperature at the exit of the condenser at least every 15 minutes and maintaining the daily average temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
5. An adsorption system with adsorbent regeneration to comply with an emission limit in table 2 to this subpart.	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR	i. Continuously monitoring the daily average organic concentration in the adsorber exhaust and maintaining the concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the	i. Maintaining the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow

	reference stream mass flow established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND Before the adsorption cycle commences, achieve and maintain the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test; AND Achieve greater than or equal to the pressure reduction during the adsorption bed regeneration cycle established during the design evaluation or performance test that demonstrated compliance with the emission limit.	established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Maintaining the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND iii. Achieving greater than or equal to the pressure reduction during the regeneration cycle established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND iv. Keeping the applicable records required in §63.998.
6. An adsorption system without adsorbent regeneration to comply with an emission limit in table 2 to this subpart.	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR	i. Continuously monitoring the organic concentration in the adsorber exhaust and maintaining the concentration less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND ii. Keeping the applicable records required in §63.998.
	b. Replace the existing adsorbent in each segment of the bed before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND Maintain the temperature of the adsorption bed less than or equal to	i. Replacing the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND

	the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.	ii. Maintaining the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND iii. Keeping the applicable records required in §63.998.
7. A flare to comply with an emission limit in table 2 to this subpart.	a. Maintain a pilot flame in the flare at all times that vapors may be vented to the flare (§63.11(b)(5)); AND	i. Continuously operating a device that detects the presence of the pilot flame; AND ii. Keeping the applicable records required in §63.998.
	b. Maintain a flare flame at all times that vapors are being vented to the flare (§63.11(b)(5)); AND	i. Maintaining a flare flame at all times that vapors are being vented to the flare; AND ii. Keeping the applicable records required in §63.998.
	c. Operate the flare with no visible emissions, except for up to 5 minutes in any 2 consecutive hours (§63.11(b)(4)); AND EITHER	i. Operating the flare with no visible emissions exceeding the amount allowed; AND ii. Keeping the applicable records required in §63.998.
	d.1. Operate the flare with an exit velocity that is within the applicable limits in §63.11(b)(7) and (8) and with a net heating value of the gas being combusted greater than the applicable minimum value in §63.11(b)(6)(ii); OR	i. Operating the flare within the applicable exit velocity limits; AND ii. Operating the flare with the gas heating value greater than the applicable minimum value; AND iii. Keeping the applicable records required in §63.998.
	d.2. Adhere to the requirements in §63.11(b)(6)(i).	i. Operating the flare within the applicable limits in 63.11(b)(6)(i); AND ii. Keeping the applicable records required in §63.998.

8. Another type of control device to comply with an emission limit in table 2 to this subpart.	Submit a monitoring plan as specified in §§63.995(c) and 63.2366(c), and monitor the control device in accordance with that plan.	Submitting a monitoring plan and monitoring the control device according to that plan.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42919, July 28, 2006]

Table 10 to Subpart EEEE of Part 63—Continuous Compliance With Work Practice Standards

As stated in §§63.2378(a) and (b) and 63.2386(c)(6), you must show continuous compliance with the work practice standards for existing, reconstructed, or new affected sources according to the following table:

For each . . .	**For the following standard . . .**	**You must demonstrate continuous compliance by . . .**
1. Internal floating roof (IFR) storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity, and vapor pressure criteria specified in table 2 to this subpart, items 1 through 5.	a. Install a floating roof designed and operated according to the applicable specifications in §63.1063(a) and (b).	i. Visually inspecting the floating roof deck, deck fittings, and rim seals of each IFR once per year (§63.1063(d)(2)); AND ii. Visually inspecting the floating roof deck, deck fittings, and rim seals of each IFR either each time the storage tank is completely emptied and degassed or every 10 years, whichever occurs first (§63.1063(c)(1), (d)(1), and (e)); AND iii. Keeping the tank records required in §63.1065.
2. External floating roof (EFR) storage tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and vapor pressure criteria specified in table 2 to this subpart, items 1 through 5.	a. Install a floating roof designed and operated according to the applicable specifications in §63.1063(a) and (b).	i. Visually inspecting the floating roof deck, deck fittings, and rim seals of each EFR either each time the storage tank is completely emptied and degassed or every 10 years, whichever occurs first (§63.1063(c)(2), (d), and (e)); AND ii. Performing seal gap measurements on the secondary seal of each EFR at least once every year, and on the primary seal of each EFR at least every 5 years (§63.1063(c)(2), (d), and (e)); AND iii. Keeping the tank records required in

		§63.1065.
3. IFR or EFR tank at an existing, reconstructed, or new affected source meeting any set of tank capacity and vapor pressure criteria specified in table 2 to this subpart, items 1 through 5.	a. Repair the conditions causing storage tank inspection failures (§63.1063(e)).	i. Repairing conditions causing inspection failures: before refilling the storage tank with organic liquid, or within 45 days (or up to 105 days with extensions) for a tank containing organic liquid; AND ii. Keeping the tank records required in §63.1065(b).
4. Transfer rack that is subject to control based on the criteria specified in table 2 to this subpart, items 7 through 10, at an existing, reconstructed, or new affected source.	a. Ensure that organic liquids are loaded into transport vehicles in accordance with the requirements in table 4 to this subpart, items 5 or 6, as applicable.	i. Ensuring that organic liquids are loaded into transport vehicles in accordance with the requirements in table 4 to this subpart, items 5 or 6, as applicable.
	b. Install and, during the loading of organic liquids, operate a vapor balancing system.	i. Monitoring each potential source of vapor leakage in the system quarterly during the loading of a transport vehicle or the filling of a container using the methods and procedures described in the rule requirements selected for the work practice standard for equipment leak components as specified in table 4 to this subpart, item 4. An instrument reading of 500 ppmv defines a leak. Repair of leaks is performed according to the repair requirements specified in your selected equipment leak standards.
	c. Route emissions to a fuel gas system or back to a process.	i. Continuing to meet the requirements specified in §63.984(b).
5. Equipment leak component, as defined in §63.2406, that operates in organic liquids service at least 300 hours per	a. Comply with the requirements of 40 CFR part 63, subpart TT, UU, or H.	i. Carrying out a leak detection and repair program in accordance with the subpart selected from the list in item 5.a of this table.

year.		
6. Storage tank at an existing, reconstructed, or new affected source meeting any of the tank capacity and vapor pressure criteria specified in table 2 to this subpart, items 1 through 6.	a. Route emissions to a fuel gas system or back to the process.	i. Continuing to meet the requirements specified in §63.984(b).
	b. Install and, during the filling of the storage tank with organic liquids, operate a vapor balancing system.	i. Except for pressure relief devices, monitoring each potential source of vapor leakage in the system, including, but not limited to pumps, valves, and sampling connections, quarterly during the loading of a storage tank using the methods and procedures described in the rule requirements selected for the work practice standard for equipment leak components as specified in Table 4 to this subpart, item 4. An instrument reading of 500 ppmv defines a leak. Repair of leaks is performed according to the repair requirements specified in your selected equipment leak standards. For pressure relief devices, comply with §63.2346(a)(4)(v). If no loading of a storage tank occurs during a quarter, then monitoring of the vapor balancing system is not required.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 42922, July 28, 2006; 73 FR 40982, July 17, 2008]

Table 11 to Subpart EEEE of Part 63—Requirements for Reports

As stated in §63.2386(a), (b), and (f), you must submit compliance reports and startup, shutdown, and malfunction reports according to the following table:

You must submit a(n) . . .	**The report must contain . . .**	**You must submit the report . . .**
1. Compliance report or Periodic Report	a. The information specified in §63.2386(c), (d), (e). If you had a SSM during the reporting period and you took actions consistent with your SSM plan, the report must also include the information in §63.10(d)(5)(i); AND	Semiannually, and it must be postmarked by January 31 or July 31, in accordance with §63.2386(b).
	b. The information required by 40 CFR part 63, subpart TT, UU, or H, as applicable, for pumps, valves, and sampling connections; AND	See the submission requirement in item 1.a of this table.
	c. The information required by §63.999(c); AND	See the submission requirement in item 1.a of this table.
	d. The information specified in §63.1066(b) including: Notification of inspection, inspection results, requests for alternate devices, and requests for extensions, as applicable.	See the submission requirement in item 1.a. of this table.
2. Immediate SSM report if you had a SSM that resulted in an applicable emission standard in the relevant standard being exceeded, and you took an action that was not consistent with your SSM plan	a. The information required in §63.10(d)(5)(ii)	i. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority (§63.10(d)(5)(ii)).

[71 FR 42923, July 28, 2006]

Table 12 to Subpart EEEE of Part 63—Applicability of General Provisions to Subpart EEEE

As stated in §§63.2382 and 63.2398, you must comply with the applicable General Provisions requirements as follows:

Citation	Subject	Brief description	Applies to subpart EEEE
§63.1	Applicability	Initial applicability determination; Applicability after standard established; Permit requirements; Extensions, Notifications	Yes.
§63.2	Definitions	Definitions for part 63 standards	Yes.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, Severability	Yes.
§63.5	Construction/Reconstruction	Applicability; Applications; Approvals	Yes.
§63.6(a)	Compliance with Standards/O&M Applicability	GP apply unless compliance extension; GP apply to area sources that become major	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.

§63.6(b)(6)	[Reserved].		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	Yes.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes.
§63.6(c)(3)-(4)	[Reserved].		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources that become major must comply with major source standards by date indicated in this subpart or by equivalent time period (*e.g.*, 3 years)	Yes.
§63.6(d)	[Reserved].		
§63.6(e)(1)	Operation & Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes.
§63.6(e)(2)	[Reserved].		

§63.6(e)(3)	SSM Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	Yes; however, (1) the 2-day reporting requirement in paragraph §63.6(e)(3)(iv) does not apply and (2) §63.6(e)(3) does not apply to emissions sources not requiring control.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	Yes.
§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)	Opacity/Visible Emission Standards	Requirements for compliance with opacity and visible emission standards	No; except as it applies to flares for which Method 22 observations are required as part of a flare compliance assessment.
§63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§63.7(a)(2)	Performance Test Dates	Dates for conducting initial	Yes.

		performance testing; must conduct 180 days after compliance date	
§63.7(a)(3)	Section 114 Authority	Adminsitrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Rescheduling	If you have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM	Yes.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.

§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes; however, for transfer racks per §§63.987(b)(3)(i)(A)-(B) and 63.997(e)(1)(v)(A)-(B) provide exceptions to the requirement for test runs to be at least 1 hour each.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes; however, performance test data is to be submitted with the Notification of Compliance Status according to the schedule specified in §63.9(h)(1)-(6) below.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved].		
§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11	Yes; however, monitoring requirements in

			§63.987(c) also apply.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	Yes.
§63.8(c)(1)(i)-(iii)	Routine and Predictable SSM	Keep parts for routine repairs readily available; reporting requirements for SSM when action is described in SSM plan.	Yes.
§63.8(c)(2)-(3)	Monitoring System Installation	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	Yes.
§63.8(c)(4)	CMS Requirements	CMS must be operating except during breakdown, out-of	Yes; however, COMS are not applicable.

		control, repair, maintenance, and high-level calibration drifts; COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period; CEMS must have a minimum of one cycle of operation for each successive 15-minute period	
§63.8(c)(5)	COMS Minimum Procedures	COMS minimum procedures	No.
§63.8(c)(6)-(8)	CMS Requirements	Zero and high level calibration check requirements. Out-of-control periods	Yes, but only applies for CEMS. 40 CFR part 63, subpart SS provides requirements for CPMS.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	Yes, but only applies for CEMS. 40 CFR part 63, subpart SS provides requirements for CPMS.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	Yes, but only applies for CEMS.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes, but 40 CFR part 63, subpart SS also provides procedures for approval of CPMS.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for CEMS	Yes.
§63.8(g)	Data Reduction	COMS 6-minute averages	Yes; however, COMS are

		calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	not applicable.
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b)(1)-(2), (4)-(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate (BACT/LAER)	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§63.9(g)	Additional Notifications When Using CMS	Notification of performance evaluation; notification about	Yes; however, there are no opacity standards.

		use of COMS data; notification that exceeded criterion for relative accuracy alternative	
§63.9(h)(1)-(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/visible emissions, which are due 30 days after; when to submit to Federal vs. State authority	Yes; however, (1) there are no opacity standards and (2) all initial Notification of Compliance Status, including all performance test data, are to be submitted at the same time, either within 240 days after the compliance date or within 60 days after the last performance test demonstrating compliance has been completed, whichever occurs first.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	No. These changes will be reported in the first and subsequent compliance reports.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep	Yes.

		for 5 years	
§63.10(b)(2)(i)-(iv)	Records Related to Startup, Shutdown, and Malfunction	Occurrence of each for operations (process equipment); occurrence of each malfunction of air pollution control equipment; maintenance on air pollution control equipment; actions during SSM	Yes.
§63.10(b)(2)(vi)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	Yes.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting initial notification and notification of compliance status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)	Records	Additional records for CMS	Yes.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	Yes.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.

§63.10(d)(5)	SSM Reports	Contents and submission	Yes.
§63.10(e)(1)-(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; 2-3 copies of COMS performance evaluation	Yes; however, COMS are not applicable.
§63.10(e)(3)(i)-(iii)	Reports	Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations)	Yes; however, note that the title of the report is the compliance report; deviations include excess emissions and parameter exceedances.
§63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions or parameter monitoring exceedance (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)-(8) and 63.10(c)(5)-(13)	Yes.
§63.10(e)(3)(vi)-(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS (now called deviations); requires all of the information in §§63.10(c)(5)-(13) and	Yes.

		63.8(c)(7)-(8)	
§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11(b)	Flares	Requirements for flares	Yes; §63.987 requirements apply, and the section references §63.11(b).
§63.11(c), (d), and (e)	Control and work practice requirements	Alternative work practice for equipment leaks	Yes.
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporation by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

[69 FR 5063, Feb. 3, 2004, as amended at 71 FR 20463, Apr. 20, 2006; 71 FR 42924, July 28, 2006; 73 FR 78215, Dec. 22, 2008]

Title 40: Protection of Environment
PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

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WHAT THIS SUBPART COVERS

§63.7480 What is the purpose of this subpart?

This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

§63.7485 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP, except as specified in §63.7491. For purposes of this subpart, a major source of HAP is as defined in §63.2, except that for oil and natural gas production facilities, a major source of HAP is as defined in §63.7575.

[78 FR 7162, Jan. 31, 2013]\

§63.7490 What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, and existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in §63.7575.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in §63.7575, located at a major source.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after June 4, 2010, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after June 4, 2010, and you meet the applicability criteria at the time you commence reconstruction.

(d) A boiler or process heater is existing if it is not new or reconstructed.

(e) An existing electric utility steam generating unit (EGU) that meets the applicability requirements of this subpart after the effective date of this final rule due to a change (e.g., fuel switch) is considered to be an existing source under this subpart.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013]

§63.7491 Are any boilers or process heaters not subject to this subpart?

The types of boilers and process heaters listed in paragraphs (a) through (n) of this section are not subject to this subpart.

(a) An electric utility steam generating unit (EGU) covered by subpart UUUUU of this part.

(b) A recovery boiler or furnace covered by subpart MM of this part.

(c) A boiler or process heater that is used specifically for research and development, including test steam boilers used to provide steam for testing the propulsion systems on military vessels. This does not include units that provide heat or steam to a process at a research and development facility.

(d) A hot water heater as defined in this subpart.

(e) A refining kettle covered by subpart X of this part.

(f) An ethylene cracking furnace covered by subpart YY of this part.

(g) Blast furnace stoves as described in EPA-453/R-01-005 (incorporated by reference, see §63.14).

(h) Any boiler or process heater that is part of the affected source subject to another subpart of this part, such as boilers and process heaters used as control devices to comply with subparts JJJ, OOO, PPP, and U of this part.

(i) Any boiler or process heater that is used as a control device to comply with another subpart of this part, or part 60, part 61, or part 65 of this chapter provided that at least 50 percent of the average annual heat input during any 3 consecutive calendar years to the boiler or process heater is provided by regulated gas streams that are subject to another standard.

(j) Temporary boilers as defined in this subpart.

(k) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

(l) Any boiler specifically listed as an affected source in any standard(s) established under section 129 of the Clean Air Act.

(m) A unit that burns hazardous waste covered by Subpart EEE of this part. A unit that is exempt from Subpart EEE as specified in §63.1200(b) is not covered by Subpart EEE.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013]

EDITORIAL NOTE: At 78 FR 7162, Jan. 31, 2013, §63.7491 was amended by revising paragraph (n). However, there is no paragraph (n) to be revised.

§63.7495 When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by January 31, 2013, or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than January 31, 2016, except as provided in §63.6(i).

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing source must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing source must be in compliance with this subpart within 3 years after the source becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

(e) If you own or operate an industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for the exemption in §63.7491(l) for commercial and industrial solid waste incineration units covered by part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart on the effective date of the switch from waste to fuel.

(f) If you own or operate an existing EGU that becomes subject to this subpart after January 31, 2013, you must be in compliance with the applicable existing source provisions of this subpart on the effective date such unit becomes subject to this subpart.

(g) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for a exemption in §63.7491(i) that becomes subject to this subpart after January 31, 2013, you must be in compliance with the applicable existing source provisions of this subpart within 3 years after such unit becomes subject to this subpart.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013]

EDITORIAL NOTE: At 78 FR 7162, Jan. 31, 2013, §63.7495 was amended by adding paragraph (e). However, there is already a paragraph (e).

EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS

§63.7499 What are the subcategories of boilers and process heaters?

The subcategories of boilers and process heaters, as defined in §63.7575 are:

(a) Pulverized coal/solid fossil fuel units.

(b) Stokers designed to burn coal/solid fossil fuel.

(c) Fluidized bed units designed to burn coal/solid fossil fuel.

(d) Stokers/sloped grate/other units designed to burn kiln dried biomass/bio-based solid.

(e) Fluidized bed units designed to burn biomass/bio-based solid.

(f) Suspension burners designed to burn biomass/bio-based solid.

(g) Fuel cells designed to burn biomass/bio-based solid.

(h) Hybrid suspension/grate burners designed to burn wet biomass/bio-based solid.

(i) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solid.

(j) Dutch ovens/pile burners designed to burn biomass/bio-based solid.

(k) Units designed to burn liquid fuel that are non-continental units.

(l) Units designed to burn gas 1 fuels.

(m) Units designed to burn gas 2 (other) gases.

(n) Metal process furnaces.

(o) Limited-use boilers and process heaters.

(p) Units designed to burn solid fuel.

(q) Units designed to burn liquid fuel.

(r) Units designed to burn coal/solid fossil fuel.

(s) Fluidized bed units with an integrated fluidized bed heat exchanger designed to burn coal/solid fossil fuel.

(t) Units designed to burn heavy liquid fuel.

(u) Units designed to burn light liquid fuel.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013]

§63.7500 What emission limitations, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (a)(1) through (3) of this section, except as provided in paragraphs (b), through (e) of this section. You must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of this section.

(1) You must meet each emission limit and work practice standard in Tables 1 through 3, and 11 through 13 to this subpart that applies to your boiler or process heater, for each boiler or process heater at your source, except as provided under §63.7522. The output-based emission limits, in units of pounds per million Btu of steam output, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers and process heaters that generate steam. The output-based emission limits, in units of pounds per megawatt-hour, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers that generate electricity. If you operate a new boiler or process heater, you can choose to comply with alternative limits as discussed in paragraphs (a)(1)(i) through (a)(1)(iii) of this section, but on or after January 31, 2016, you must comply with the emission limits in Table 1 to this subpart.

(i) If your boiler or process heater commenced construction or reconstruction after June 4, 2010 and before May 20, 2011, you may comply with the emission limits in Table 1 or 11 to this subpart until January 31, 2016.

(ii) If your boiler or process heater commenced construction or reconstruction after May 20, 2011 and before December 23, 2011, you may comply with the emission limits in Table 1 or 12 to this subpart until January 31, 2016.

(iii) If your boiler or process heater commenced construction or reconstruction after December 23, 2011 and before January 31, 2013, you may comply with the emission limits in Table 1 or 13 to this subpart until January 31, 2016.

(2) You must meet each operating limit in Table 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Table 4 to this subpart, or you wish to establish and monitor an alternative operating limit or an alternative monitoring parameter, you must apply to the EPA Administrator for approval of alternative monitoring under §63.8(f).

(3) At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

(c) Limited-use boilers and process heaters must complete a tune-up every 5 years as specified in §63.7540. They are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, the annual tune-up, or the energy assessment requirements in Table 3 to this subpart, or the operating limits in Table 4 to this subpart.

(d) Boilers and process heaters with a heat input capacity of less than or equal to 5 million Btu per hour in the units designed to burn gas 2 (other) fuels subcategory or units designed to burn light liquid fuels subcategory must complete a tune-up every 5 years as specified in §63.7540.

(e) Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart.

(f) These standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time you must comply only with Table 3 to this subpart.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013]

§63.7501 Affirmative Defense for Violation of Emission Standards During Malfunction.

In response to an action to enforce the standards set forth in §63.7500 you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at §63.2. Appropriate penalties may be assessed if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) *Assertion of affirmative defense.* To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The violation:

(i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and

(ii) Could not have been prevented through careful planning, proper design, or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when a violation occurred; and

(3) The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

(4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

(b) *Report.* The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in §63.7500 of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of

the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[78 FR 7163, Jan. 31, 2013]

GENERAL COMPLIANCE REQUIREMENTS

§63.7505 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits, work practice standards, and operating limits in this subpart. These limits apply to you at all times the affected unit is operating except for the periods noted in §63.7500(f).

(b) [Reserved]

(c) You must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS), continuous parameter monitoring system (CPMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. You may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCl), mercury, or total selected metals (TSM) using fuel analysis if the emission rate calculated according to §63.7530(c) is less than the applicable emission limit. (For gaseous fuels, you may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) Otherwise, you must demonstrate compliance for HCl, mercury, or TSM using performance testing, if subject to an applicable emission limit listed in Tables 1, 2, or 11 through 13 to this subpart.

(d) If you demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits (including the use of CPMS), or with a CEMS, or COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section for the use of any CEMS, COMS, or CPMS. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each CMS required in this section (including CEMS, COMS, or CPMS), you must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in §63.8(d) and the elements described in paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance specifications under appendix B to part 60 of this chapter and that meet the requirements of §63.7525. Using the process described in §63.8(f)(4), you may request approval of alternative monitoring system quality assurance and quality control procedures in place of those specified in this paragraph and, if approved, include the alternatives in your site-specific monitoring plan.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations, accuracy audits, analytical drift).

(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 10 to this subpart), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7164, Jan. 31, 2013]

TESTING, FUEL ANALYSES, AND INITIAL COMPLIANCE REQUIREMENTS

§63.7510 What are my initial compliance requirements and by what date must I conduct them?

(a) For each boiler or process heater that is required or that you elect to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 or 11 through 13 of this subpart through performance testing, your initial compliance requirements include all the following:

(1) Conduct performance tests according to §63.7520 and Table 5 to this subpart.

(2) Conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, except as specified in paragraphs (a)(2)(i) through (iii) of this section.

(i) For each boiler or process heater that burns a single type of fuel, you are not required to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart. For purposes of this subpart, units that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as units that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under §63.7521 and Table 6 to this subpart.

(ii) When natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels, you are not required to conduct a fuel analysis of those fuels according to §63.7521 and Table 6 to this subpart. If gaseous fuels other than natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels and those gaseous fuels are subject to another subpart of this part, part 60, part 61, or part 65, you are not required to conduct a fuel analysis of those fuels according to §63.7521 and Table 6 to this subpart.

(iii) You are not required to conduct a chlorine fuel analysis for any gaseous fuels. You must conduct a fuel analysis for mercury on gaseous fuels unless the fuel is exempted in paragraphs (a)(2)(i) and (ii) of this section.

(3) Establish operating limits according to §63.7530 and Table 7 to this subpart.

(4) Conduct CMS performance evaluations according to §63.7525.

(b) For each boiler or process heater that you elect to demonstrate compliance with the applicable emission limits in Tables 1 or 2 or 11 through 13 to this subpart for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart and establish operating limits according to §63.7530 and Table 8 to this subpart. The fuels described in paragraph (a)(2)(i) and (ii) of this section are exempt from these fuel analysis and operating limit requirements. The fuels described in paragraph (a)(2)(ii) of this section are exempt from the chloride fuel analysis and operating limit requirements. Boilers and process heaters that use a CEMS for mercury or HCl are exempt from the performance testing and operating limit requirements specified in paragraph (a) of this section for the HAP for which CEMS are used.

(c) If your boiler or process heater is subject to a carbon monoxide (CO) limit, your initial compliance demonstration for CO is to conduct a performance test for CO according to Table 5 to this subpart or conduct a performance evaluation of your continuous CO monitor, if applicable, according to §63.7525(a). Boilers and process heaters that use a CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Tables 12, or 11 through 13 to this subpart, as specified in §63.7525(a), are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in paragraph (a) of this section.

(d) If your boiler or process heater is subject to a PM limit, your initial compliance demonstration for PM is to conduct a performance test in accordance with §63.7520 and Table 5 to this subpart.

(e) For existing affected sources (as defined in §63.7490), you must complete the initial compliance demonstration, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the compliance date that is specified for your source in §63.7495 and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart, except as specified in paragraph (j) of this section. You must complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than the compliance date specified in §63.7495, except as specified in paragraph (j) of this section. You must complete the one-time energy assessment specified in Table 3 to this subpart no later than the compliance date specified in §63.7495, except as specified in paragraph (j) of this section.

(f) For new or reconstructed affected sources (as defined in §63.7490), you must complete the initial compliance demonstration with the emission limits no later than July 30, 2013 or within 180 days after startup of the source, whichever is later. If you are demonstrating compliance with an emission limit in Tables 11 through 13 to this subpart that is less stringent (that is, higher) than the applicable emission limit in Table 1 to this subpart, you must demonstrate compliance with the applicable emission limit in Table 1 no later than July 29, 2016.

(g) For new or reconstructed affected sources (as defined in §63.7490), you must demonstrate initial compliance with the applicable work practice standards in Table 3 to this subpart within the applicable annual, biennial, or 5-year schedule as specified in §63.7540(a) following the initial compliance date specified in §63.7495(a). Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in §63.7540(a).

(h) For affected sources (as defined in §63.7490) that ceased burning solid waste consistent with §63.7495(e) and for which the initial compliance date has passed, you must demonstrate compliance within 60 days of the effective date of the waste-to-fuel switch. If you have not conducted your compliance demonstration for this subpart within the previous 12 months, you must complete all compliance demonstrations for this subpart before you commence or recommence combustion of solid waste.

(i) For an existing EGU that becomes subject after January 31, 2013, you must demonstrate compliance within 180 days after becoming an affected source.

(j) For existing affected sources (as defined in §63.7490) that have not operated between the effective date of the rule and the compliance date that is specified for your source in §63.7495, you must complete the initial compliance demonstration, if subject to the emission limits in Table 2 to this subpart, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the re-start of the affected source and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart. You must complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than 30 days after the re-start of the affected source and, if applicable, complete the one-time energy assessment specified in Table 3 to this subpart, no later than the compliance date specified in §63.7495.

[78 FR 7164, Jan. 31, 2013]

§63.7515 When must I conduct subsequent performance tests, fuel analyses, or tune-ups?

(a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, except as specified in paragraphs (b) through (e), (g), and (h) of this section. Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in paragraphs (b) through (e), (g), and (h) of this section.

(b) If your performance tests for a given pollutant for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit (or, in limited instances as specified in Tables 1 and 2 or 11 through 13 to this subpart, at or below the emission limit) for the pollutant, and if there are no changes in the operation of the individual boiler or process heater or air pollution control equipment that could increase emissions, you may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. If you elect to demonstrate compliance using emission averaging under §63.7522, you must continue to conduct performance tests annually. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury. The requirement to test at maximum TSM input level is waived unless the stack test is conducted for TSM.

(c) If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit (as specified in Tables 1 and 2 or 11 through 13 to this subpart) for a pollutant, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit, as specified in Tables 1 and 2 or 11 through 13 to this subpart).

(d) If you are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to §63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in §63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after the initial startup of the new or reconstructed affected source.

(e) If you demonstrate compliance with the mercury, HCl, or TSM based on fuel analysis, you must conduct a monthly fuel analysis according to §63.7521 for each type of fuel burned that is subject to an emission limit in Tables 1, 2, or 11 through 13 to this subpart. You may comply with this monthly requirement by completing the fuel analysis any time within the calendar month as long as the analysis is separated from the previous analysis by at least 14 calendar days. If you burn a new type of fuel, you

must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in §63.7540. If each of 12 consecutive monthly fuel analyses demonstrates 75 percent or less of the compliance level, you may decrease the fuel analysis frequency to quarterly for that fuel. If any quarterly sample exceeds 75 percent of the compliance level or you begin burning a new type of fuel, you must return to monthly monitoring for that fuel, until 12 months of fuel analyses are again less than 75 percent of the compliance level.

(f) You must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to §63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests must include all applicable information required in §63.7550.

(g) For affected sources (as defined in §63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, you must complete the subsequent compliance demonstration, if subject to the emission limits in Tables 1, 2, or 11 through 13 to this subpart, no later than 180 days after the re-start of the affected source and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart. You must complete a subsequent tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) and the schedule described in §63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up.

(h) If your affected boiler or process heater is in the unit designed to burn light liquid subcategory and you combust ultra low sulfur liquid fuel, you do not need to conduct further performance tests if the pollutants measured during the initial compliance performance tests meet the emission limits in Tables 1 or 2 of this subpart providing you demonstrate ongoing compliance with the emissions limits by monitoring and recording the type of fuel combusted on a monthly basis. If you intend to use a fuel other than ultra low sulfur liquid fuel, natural gas, refinery gas, or other gas 1 fuel, you must conduct new performance tests within 60 days of burning the new fuel type.

(i) If you operate a CO CEMS that meets the Performance Specifications outlined in §63.7525(a)(3) of this subpart to demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart, you are not required to conduct CO performance tests and are not subject to the oxygen concentration operating limit requirement specified in §63.7510(a).

[78 FR 7165, Jan. 31, 2013]

§63.7520 What stack tests and procedures must I use?

(a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific stack test plan according to the requirements in §63.7(c). You shall conduct all performance tests under such conditions as the Administrator specifies to you based on the representative performance of each boiler or process heater for the period being tested. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests.

(b) You must conduct each performance test according to the requirements in Table 5 to this subpart.

(c) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if you are opting to comply with the TSM alternative standard and you must demonstrate initial

compliance and establish your operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.

(d) You must conduct a minimum of three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Tables 1 and 2 or 11 through 13 to this subpart.

(e) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 at 40 CFR part 60, appendix A-7 of this chapter to convert the measured particulate matter (PM) concentrations, the measured HCl concentrations, the measured mercury concentrations, and the measured TSM concentrations that result from the performance test to pounds per million Btu heat input emission rates.

(f) Except for a 30-day rolling average based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), you must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7166, Jan. 31, 2013]

§63.7521 What fuel analyses, fuel specification, and procedures must I use?

(a) For solid and liquid fuels, you must conduct fuel analyses for chloride and mercury according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable. For solid fuels and liquid fuels, you must also conduct fuel analyses for TSM if you are opting to comply with the TSM alternative standard. For gas 2 (other) fuels, you must conduct fuel analyses for mercury according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable. (For gaseous fuels, you may not use fuel analyses to comply with the TSM alternative standard or the HCl standard.) For purposes of complying with this section, a fuel gas system that consists of multiple gaseous fuels collected and mixed with each other is considered a single fuel type and sampling and analysis is only required on the combined fuel gas system that will feed the boiler or process heater. Sampling and analysis of the individual gaseous streams prior to combining is not required. You are not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. You are required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury, HCl, or TSM in Tables 1 and 2 or 11 through 13 to this subpart. Gaseous and liquid fuels are exempt from the sampling requirements in paragraphs (c) and (d) of this section and Table 6 to this subpart.

(b) You must develop a site-specific fuel monitoring plan according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section, if you are required to conduct fuel analyses as specified in §63.7510.

(1) If you intend to use an alternative analytical method other than those required by Table 6 to this subpart, you must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that you intend to conduct the initial compliance demonstration described in §63.7510.

(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.

(ii) For each anticipated fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.

(iii) For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.

(iv) For each anticipated fuel type, the analytical methods from Table 6, with the expected minimum detection levels, to be used for the measurement of chlorine or mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 shall be used until the requested alternative is approved.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(c) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section, or the methods listed in Table 6 to this subpart, or use an automated sampling mechanism that provides representative composite fuel samples for each fuel type that includes both coarse and fine material.

(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. You must collect all the material (fines and coarse) in the full cross-section. You must transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal one-hour intervals during the testing period for sampling during performance stack testing. For monthly sampling, each composite sample shall be collected at approximately equal 10-day intervals during the month.

(2) If sampling from a fuel pile or truck, you must collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, you must select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, you must dig into the pile to a uniform depth of approximately 18 inches. You must insert a clean shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling; use the same shovel to collect all samples.

(iii) You must transfer all samples to a clean plastic bag for further processing.

(d) You must prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.

(1) You must thoroughly mix and pour the entire composite sample over a clean plastic sheet.

(2) You must break large sample pieces (e.g., larger than 3 inches) into smaller sizes.

(3) You must make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) You must separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, you must repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) You must grind the sample in a mill.

(7) You must use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) You must determine the concentration of pollutants in the fuel (mercury and/or chlorine and/or TSM) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart, for use in Equations 7, 8, and 9 of this subpart.

(f) To demonstrate that a gaseous fuel other than natural gas or refinery gas qualifies as an other gas 1 fuel, as defined in §63.7575, you must conduct a fuel specification analyses for mercury according to the procedures in paragraphs (g) through (i) of this section and Table 6 to this subpart, as applicable, except as specified in paragraph (f)(1) through (4) of this section.

(1) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for natural gas or refinery gas.

(2) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for gaseous fuels that are subject to another subpart of this part, part 60, part 61, or part 65.

(3) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section on gaseous fuels for units that are complying with the limits for units designed to burn gas 2 (other) fuels.

(4) You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for gas streams directly derived from natural gas at natural gas production sites or natural gas plants.

(g) You must develop and submit a site-specific fuel analysis plan for other gas 1 fuels to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (g)(1) and (2) of this section.

(1) If you intend to use an alternative analytical method other than those required by Table 6 to this subpart, you must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that you intend to conduct the initial compliance demonstration described in §63.7510.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all gaseous fuel types other than those exempted from fuel specification analysis under (f)(1) through (3) of this section anticipated to be burned in each boiler or process heater.

(ii) For each anticipated fuel type, the notification of whether you or a fuel supplier will be conducting the fuel specification analysis.

(iii) For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the samples if your procedures are different from the sampling methods contained in Table 6 to this subpart. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. If multiple boilers or process heaters are fueled by a common fuel stream it is permissible to conduct a single gas specification at the common point of gas distribution.

(iv) For each anticipated fuel type, the analytical methods from Table 6 to this subpart, with the expected minimum detection levels, to be used for the measurement of mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 to this subpart shall be used until the requested alternative is approved.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(h) You must obtain a single fuel sample for each fuel type according to the sampling procedures listed in Table 6 for fuel specification of gaseous fuels.

(i) You must determine the concentration in the fuel of mercury, in units of microgram per cubic meter, dry basis, of each sample for each other gas 1 fuel type according to the procedures in Table 6 to this subpart.

[78 FR 7167, Jan. 31, 2013]

§63.7522 Can I use emissions averaging to comply with this subpart?

(a) As an alternative to meeting the requirements of §63.7500 for PM (or TSM), HCl, or mercury on a boiler or process heater-specific basis, if you have more than one existing boiler or process heater in any subcategories located at your facility, you may demonstrate compliance by emissions averaging, if your averaged emissions are not more than 90 percent of the applicable emission limit, according to the procedures in this section. You may not include new boilers or process heaters in an emissions average.

(b) For a group of two or more existing boilers or process heaters in the same subcategory that each vent to a separate stack, you may average PM (or TSM), HCl, or mercury emissions among existing units to demonstrate compliance with the limits in Table 2 to this subpart as specified in paragraph (b)(1) through (3) of this section, if you satisfy the requirements in paragraphs (c) through (g) of this section.

(1) You may average units using a CEMS or PM CPMS for demonstrating compliance.

(2) For mercury and HCl, averaging is allowed as follows:

(i) You may average among units in any of the solid fuel subcategories.

(ii) You may average among units in any of the liquid fuel subcategories.

(iii) You may average among units in a subcategory of units designed to burn gas 2 (other) fuels.

(iv) You may not average across the units designed to burn liquid, units designed to burn solid fuel, and units designed to burn gas 2 (other) subcategories.

(3) For PM (or TSM), averaging is only allowed between units within each of the following subcategories and you may not average across subcategories:

(i) Units designed to burn coal/solid fossil fuel.

(ii) Stokers/sloped grate/other units designed to burn kiln dried biomass/bio-based solids.

(iii) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solids.

(iv) Fluidized bed units designed to burn biomass/bio-based solid.

(v) Suspension burners designed to burn biomass/bio-based solid.

(vi) Dutch ovens/pile burners designed to burn biomass/bio-based solid.

(vii) Fuel Cells designed to burn biomass/bio-based solid.

(viii) Hybrid suspension/grate burners designed to burn wet biomass/bio-based solid.

(ix) Units designed to burn heavy liquid fuel.

(x) Units designed to burn light liquid fuel.

(xi) Units designed to burn liquid fuel that are non-continental units.

(xii) Units designed to burn gas 2 (other) gases.

(c) For each existing boiler or process heater in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on January 31, 2013 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on January 31, 2013.

(d) The averaged emissions rate from the existing boilers and process heaters participating in the emissions averaging option must not exceed 90 percent of the limits in Table 2 to this subpart at all times the affected units are operating following the compliance date specified in §63.7495.

(e) You must demonstrate initial compliance according to paragraph (e)(1) or (2) of this section using the maximum rated heat input capacity or maximum steam generation capacity of each unit and the results of the initial performance tests or fuel analysis.

(1) You must use Equation 1a or 1b or 1c of this section to demonstrate that the PM (or TSM), HCl, or mercury emissions from all existing units participating in the emissions averaging option for that

pollutant do not exceed the emission limits in Table 2 to this subpart. Use Equation 1a if you are complying with the emission limits on a heat input basis, use Equation 1b if you are complying with the emission limits on a steam generation (output) basis, and use Equation 1c if you are complying with the emission limits on a electric generation (output) basis.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Hm) \div \sum_{i=1}^{n} Hm \qquad \text{(Eq.1a)}$$

Where:

AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c).

Hm = Maximum rated heat input capacity of unit, i, in units of million Btu per hour.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times So) \div \sum_{i=1}^{n} So \qquad \text{(Eq.1b)}$$

Where:

AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of steam output.

Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of steam output. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c). If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, Eadj, determined according to §63.7533 for that unit.

So = Maximum steam output capacity of unit, i, in units of million Btu per hour, as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Eo) \div \sum_{i=1}^{n} Eo \qquad \text{(Eq.1c)}$$

Where:

AveWeightedEmissions = Average weighted emissions for PM (or TSM), HCl, or mercury, in units of pounds per megawatt hour.

Er = Emission rate (as determined during the initial compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per megawatt hour. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c). If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, Eadj, determined according to §63.7533 for that unit.

Eo = Maximum electric generating output capacity of unit, i, in units of megawatt hour, as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

(2) If you are not capable of determining the maximum rated heat input capacity of one or more boilers that generate steam, you may use Equation 2 of this section as an alternative to using Equation 1a of this section to demonstrate that the PM (or TSM), HCl, or mercury emissions from all existing units participating in the emissions averaging option do not exceed the emission limits for that pollutant in Table 2 to this subpart that are in pounds per million Btu of heat input.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n}(Er \times Sm \times Cfi) \div \sum_{i=1}^{n}(Sm \times Cfi) \quad \text{(Eq. 2)}$$

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM using the applicable equation in §63.7530(c).

Sm = Maximum steam generation capacity by unit, i, in units of pounds per hour.

Cfi = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for unit, i.

1.1 = Required discount factor.

(f) After the initial compliance demonstration described in paragraph (e) of this section, you must demonstrate compliance on a monthly basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) through (3) of this section. The first monthly period begins on the compliance date specified in §63.7495. If the affected source elects to collect monthly data for up the 11 months preceding the first monthly period, these additional data points can be used to compute the 12-month rolling average in paragraph (f)(3) of this section.

(1) For each calendar month, you must use Equation 3a or 3b or 3c of this section to calculate the average weighted emission rate for that month. Use Equation 3a and the actual heat input for the month for each existing unit participating in the emissions averaging option if you are complying with emission limits on a heat input basis. Use Equation 3b and the actual steam generation for the month if you are complying with the emission limits on a steam generation (output) basis. Use Equation 3c and the actual steam generation for the month if you are complying with the emission limits on a electrical generation (output) basis.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n}(Er \times Hb) \div \sum_{i=1}^{n} Hb \quad \text{(Eq. 3a)}$$

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input, for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart.

Hb = The heat input for that calendar month to unit, i, in units of million Btu.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times So) \div \sum_{i=1}^{n} So \quad \text{(Eq. 3b)}$$

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of steam output, for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of steam output. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart. If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, E_{adj}, determined according to §63.7533 for that unit.

So = The steam output for that calendar month from unit, i, in units of million Btu, as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Eo) \div \sum_{i=1}^{n} Eo \quad \text{(Eq. 3c)}$$

Where:

AveWeightedEmissions = Average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per megawatt hour, for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration) of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per megawatt hour. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart. If you are taking credit for energy conservation measures from a unit according to §63.7533, use the adjusted emission level for that unit, E_{adj}, determined according to §63.7533 for that unit.

Eo = The electric generating output for that calendar month from unit, i, in units of megawatt hour, as defined in §63.7575.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

(2) If you are not capable of monitoring heat input, you may use Equation 4 of this section as an alternative to using Equation 3a of this section to calculate the average weighted emission rate using the actual steam generation from the boilers participating in the emissions averaging option.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Sa \times Cfi) \div \sum_{i=1}^{n} (Sa \times Cfi) \quad \text{(Eq. 4)}$$

Where:

AveWeightedEmissions = average weighted emission level for PM (or TSM), HCl, or mercury, in units of pounds per million Btu of heat input for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration of PM (or TSM), HCl, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for PM (or TSM), HCl, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart.

Sa = Actual steam generation for that calendar month by boiler, i, in units of pounds.

Cfi = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for boiler, i.

1.1 = Required discount factor.

(3) Until 12 monthly weighted average emission rates have been accumulated, calculate and report only the average weighted emission rate determined under paragraph (f)(1) or (2) of this section for each calendar month. After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, use Equation 5 of this section to calculate the 12-month rolling average of the monthly weighted average emission rates for the current calendar month and the previous 11 calendar months.

$$Eavg = \sum_{i=1}^{n} ERi \div 12 \quad \text{(Eq. 5)}$$

Where:

Eavg = 12-month rolling average emission rate, (pounds per million Btu heat input)

ERi = Monthly weighted average, for calendar month “i” (pounds per million Btu heat input), as calculated by paragraph (f)(1) or (2) of this section.

(g) You must develop, and submit upon request to the applicable Administrator for review and approval, an implementation plan for emission averaging according to the following procedures and requirements in paragraphs (g)(1) through (4) of this section.

(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing boilers and process heaters in the averaging group, including for each either the applicable HAP emission level or the control technology installed as of January 31, 2013 and the date on which you are requesting emission averaging to commence;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group;

(iii) The specific control technology or pollution prevention measure to be used for each emission boiler or process heater in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple boilers or process heaters, the owner or operator must identify each boiler or process heater;

(iv) The test plan for the measurement of PM (or TSM), HCl, or mercury emissions in accordance with the requirements in §63.7520;

(v) The operating parameters to be monitored for each control system or device consistent with §63.7500 and Table 4, and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the Administrator, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating load conditions. Following each compliance demonstration and until the next compliance demonstration, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.

(3) The Administrator shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable Administrator shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing unit in the same subcategories.

(h) For a group of two or more existing affected units, each of which vents through a single common stack, you may average PM (or TSM), HCl, or mercury emissions to demonstrate compliance with the limits for that pollutant in Table 2 to this subpart if you satisfy the requirements in paragraph (i) or (j) of this section.

(i) For a group of two or more existing units in the same subcategories, each of which vents through a common emissions control system to a common stack, that does not receive emissions from units in other subcategories or categories, you may treat such averaging group as a single existing unit for purposes of this subpart and comply with the requirements of this subpart as if the group were a single unit.

(j) For all other groups of units subject to the common stack requirements of paragraph (h) of this section, including situations where the exhaust of affected units are each individually controlled and then sent to a common stack, the owner or operator may elect to:

(1) Conduct performance tests according to procedures specified in §63.7520 in the common stack if affected units from other subcategories vent to the common stack. The emission limits that the group must comply with are determined by the use of Equation 6 of this section.

$$En = \sum_{i=1}^{n} (ELi \times Hi) \div \sum_{i=1}^{n} Hi \qquad \text{(Eq. 6)}$$

Where:

En = HAP emission limit, pounds per million British thermal units (lb/MMBtu), parts per million (ppm), or nanograms per dry standard cubic meter (ng/dscm).

ELi = Appropriate emission limit from Table 2 to this subpart for unit i, in units of lb/MMBtu, ppm or ng/dscm.

Hi = Heat input from unit i, MMBtu.

(2) Conduct performance tests according to procedures specified in §63.7520 in the common stack. If affected units and non-affected units vent to the common stack, the non-affected units must be shut down or vented to a different stack during the performance test unless the facility determines to demonstrate compliance with the non-affected units venting to the stack; and

(3) Meet the applicable operating limit specified in §63.7540 and Table 8 to this subpart for each emissions control system (except that, if each unit venting to the common stack has an applicable opacity operating limit, then a single continuous opacity monitoring system may be located in the common stack instead of in each duct to the common stack).

(k) The common stack of a group of two or more existing boilers or process heaters in the same subcategories subject to paragraph (h) of this section may be treated as a separate stack for purposes of paragraph (b) of this section and included in an emissions averaging group subject to paragraph (b) of this section.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7168, Jan. 31, 2013]

§63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If your boiler or process heater is subject to a CO emission limit in Tables 1, 2, or 11 through 13 to this subpart, you must install, operate, and maintain an oxygen analyzer system, as defined in §63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen according to the procedures in paragraphs (a)(1) through (7) of this section.

(1) Install the CO CEMS and oxygen analyzer by the compliance date specified in §63.7495. The CO and oxygen levels shall be monitored at the same location at the outlet of the boiler or process heater.

(2) To demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart, you must install, certify, operate, and maintain a CO CEMS and an oxygen analyzer according to the applicable procedures under Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B, the site-specific monitoring plan developed according to §63.7505(d), and the requirements in §63.7540(a)(8) and paragraph (a) of this section. Any boiler or process heater that has a CO CEMS that is compliant with Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B, a site-specific monitoring plan developed according to §63.7505(d), and the requirements in §63.7540(a)(8) and paragraph (a) of this section must use the CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Tables 1, 2, or 11 through 13 to this subpart.

(i) You must conduct a performance evaluation of each CO CEMS according to the requirements in §63.8(e) and according to Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B.

(ii) During each relative accuracy test run of the CO CEMS, you must be collect emission data for CO concurrently (or within a 30- to 60-minute period) by both the CO CEMS and by Method 10, 10A, or 10B at 40 CFR part 60, appendix A-4. The relative accuracy testing must be at representative operating conditions.

(iii) You must follow the quality assurance procedures (e.g., quarterly accuracy determinations and daily calibration drift tests) of Procedure 1 of appendix F to part 60. The measurement span value of the CO CEMS must be two times the applicable CO emission limit, expressed as a concentration.

(iv) Any CO CEMS that does not comply with §63.7525(a) cannot be used to meet any requirement in this subpart to demonstrate compliance with a CO emission limit listed in Tables 1, 2, or 11 through 13 to this subpart.

(v) For a new unit, complete the initial performance evaluation no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, complete the initial performance evaluation no later than July 29, 2016.

(3) Complete a minimum of one cycle of CO and oxygen CEMS operation (sampling, analyzing, and data recording) for each successive 15-minute period. Collect CO and oxygen data concurrently. Collect at least four CO and oxygen CEMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CEMS calibration, quality assurance, or maintenance activities are being performed.

(4) Reduce the CO CEMS data as specified in §63.8(g)(2).

(5) Calculate one-hour arithmetic averages, corrected to 3 percent oxygen from each hour of CO CEMS data in parts per million CO concentration. The one-hour arithmetic averages required shall be used to calculate the 30-day or 10-day rolling average emissions. Use Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR part 60, appendix A-7 for calculating the average CO concentration from the hourly values.

(6) For purposes of collecting CO data, operate the CO CEMS as specified in §63.7535(b). You must use all the data collected during all periods in calculating data averages and assessing compliance, except that you must exclude certain data as specified in §63.7535(c). Periods when CO data are unavailable may constitute monitoring deviations as specified in §63.7535(d).

(7) Operate an oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 to this subpart.

(b) If your boiler or process heater is in the unit designed to burn coal/solid fossil fuel subcategory or the unit designed to burn heavy liquid subcategory and has an average annual heat input rate greater than 250 MMBtu per hour from solid fossil fuel and/or heavy liquid, and you demonstrate compliance with the PM limit instead of the alternative TSM limit, you must install, certify, maintain, and operate a PM CPMS monitoring emissions discharged to the atmosphere and record the output of the system as specified in paragraphs (b)(1) through (4) of this section. As an alternative to use of a PM CPMS to demonstrate compliance with the PM limit, you may choose to use a PM CEMS. If you choose to use a PM CEMS to demonstrate compliance with the PM limit instead of the alternative TSM limit, you must install, certify, maintain, and operate a PM CEMS monitoring emissions discharged to the atmosphere and record the output of the system as specified in paragraph (b)(5) through (8) of this section. For other boilers or process heaters, you may elect to use a PM CPMS or PM CEMS operated in accordance with this section in lieu of using other CMS for monitoring PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure). Owners of boilers and process heaters who elect to comply with the alternative TSM limit are not required to install a PM CPMS.

(1) Install, certify, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with §63.7505(d), the requirements in §63.7540(a)(9), and paragraphs (b)(1)(i) through (iii) of this section.

(i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation detection of PM in the exhaust gas or representative exhaust gas sample. The reportable measurement output from the PM CPMS must be expressed as milliamps.

(ii) The PM CPMS must have a cycle time (i.e., period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes.

(iii) The PM CPMS must be capable of detecting and responding to PM concentrations of no greater than 0.5 milligram per actual cubic meter.

(2) For a new unit, complete the initial performance evaluation no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, complete the initial performance evaluation no later than July 29, 2016.

(3) Collect PM CPMS hourly average output data for all boiler or process heater operating hours except as indicated in §63.7535(a) through (d). Express the PM CPMS output as milliamps.

(4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output data collected during all boiler or process heater operating hours (milliamps).

(5) Install, certify, operate, and maintain your PM CEMS according to the procedures in your approved site-specific monitoring plan developed in accordance with §63.7505(d), the requirements in §63.7540(a)(9), and paragraphs (b)(5)(i) through (iv) of this section.

(i) You shall conduct a performance evaluation of the PM CEMS according to the applicable requirements of §60.8(e), and Performance Specification 11 at 40 CFR part 60, appendix B of this chapter.

(ii) During each PM correlation testing run of the CEMS required by Performance Specification 11 at 40 CFR part 60, appendix B of this chapter, you shall collect PM and oxygen (or carbon dioxide) data concurrently (or within a 30-to 60-minute period) by both the CEMS and conducting performance tests using Method 5 at 40 CFR part 60, appendix A-3 or Method 17 at 40 CFR part 60, appendix A-6 of this chapter.

(iii) You shall perform quarterly accuracy determinations and daily calibration drift tests in accordance with Procedure 2 at 40 CFR part 60, appendix F of this chapter. You must perform Relative Response Audits annually and perform Response Correlation Audits every 3 years.

(iv) Within 60 days after the date of completing each CEMS relative accuracy test audit or performance test conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data to the EPA by successfully submitting the data electronically into the EPA's Central Data Exchange by using the Electronic Reporting Tool (see *http://www.epa.gov/ttn/chief/ert/erttool.html/*).

(6) For a new unit, complete the initial performance evaluation no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, complete the initial performance evaluation no later than July 29, 2016.

(7) Collect PM CEMS hourly average output data for all boiler or process heater operating hours except as indicated in §63.7535(a) through (d).

(8) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CEMS output data collected during all boiler or process heater operating hours.

(c) If you have an applicable opacity operating limit in this rule, and are not otherwise required or elect to install and operate a PM CPMS, PM CEMS, or a bag leak detection system, you must install, operate, certify and maintain each COMS according to the procedures in paragraphs (c)(1) through (7) of this section by the compliance date specified in §63.7495.

(1) Each COMS must be installed, operated, and maintained according to Performance Specification 1 at appendix B to part 60 of this chapter.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8(e) and according to Performance Specification 1 at appendix B to part 60 of this chapter.

(3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). You must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit. Any 6-minute period for which the monitoring system is out of control and data are not available for a required calculation constitutes a deviation from the monitoring requirements.

(7) You must determine and record all the 6-minute averages (and daily block averages as applicable) collected for periods during which the COMS is not out of control.

(d) If you have an operating limit that requires the use of a CMS other than a PM CPMS or COMS, you must install, operate, and maintain each CMS according to the procedures in paragraphs (d)(1) through (5) of this section by the compliance date specified in §63.7495.

(1) The CPMS must complete a minimum of one cycle of operation every 15-minutes. You must have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid hour of data.

(2) You must operate the monitoring system as specified in §63.7535(b), and comply with the data calculation requirements specified in §63.7535(c).

(3) Any 15-minute period for which the monitoring system is out-of-control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. Other situations that constitute a monitoring deviation are specified in §63.7535(d).

(4) You must determine the 30-day rolling average of all recorded readings, except as provided in §63.7535(c).

(5) You must record the results of each inspection, calibration, and validation check.

(e) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (d) and (e)(1) through (4) of this section.

(1) You must install the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) You must use a flow sensor with a measurement sensitivity of no greater than 2 percent of the design flow rate.

(3) You must minimize, consistent with good engineering practices, the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) You must conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(f) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (d) and (f)(1) through (6) of this section.

(1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.*, PM scrubber pressure drop).

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion consistent with good engineering practices.

(3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less.

(4) Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (*e.g.*, check for pressure tap pluggage daily).

(5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in you monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.

(g) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (d) and (g)(1) through (4) of this section.

(1) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Conduct a performance evaluation of the pH monitoring system in accordance with your monitoring plan at least once each process operating day.

(4) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than quarterly.

(h) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber, you must meet the requirements in paragraphs (h)(1) and (2) of this section.

(1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates.

(2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(i) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (d) and (i)(1) through (2) of this section.

(1) Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(j) If you are not required to use a PM CPMS and elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate the bag leak detection system as specified in paragraphs (j)(1) through (6) of this section.

(1) You must install a bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute PM loadings for each exhaust stack, roof vent, or compartment (e.g., for a positive pressure fabric filter) of the fabric filter.

(2) Conduct a performance evaluation of the bag leak detection system in accordance with your monitoring plan and consistent with the guidance provided in EPA-454/R-98-015 (incorporated by reference, see §63.14).

(3) Use a bag leak detection system certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) Use a bag leak detection system equipped with a device to record continuously the output signal from the sensor.

(5) Use a bag leak detection system equipped with a system that will alert plant operating personnel when an increase in relative PM emissions over a preset level is detected. The alert must easily recognizable (e.g., heard or seen) by plant operating personnel.

(6) Where multiple bag leak detectors are required, the system's instrumentation and alert may be shared among detectors.

(k) For each unit that meets the definition of limited-use boiler or process heater, you must keep fuel use records for the days the boiler or process heater was operating.

(l) For each unit for which you decide to demonstrate compliance with the mercury or HCl emissions limits in Tables 1 or 2 or 11 through 13 of this subpart by use of a CEMS for mercury or HCl, you must install, certify, maintain, and operate a CEMS measuring emissions discharged to the atmosphere and record the output of the system as specified in paragraphs (l)(1) through (8) of this section. For HCl, this option for an affected unit takes effect on the date a final performance specification for a HCl CEMS is published in the FEDERAL REGISTER or the date of approval of a site-specific monitoring plan.

(1) Notify the Administrator one month before starting use of the CEMS, and notify the Administrator one month before stopping use of the CEMS.

(2) Each CEMS shall be installed, certified, operated, and maintained according to the requirements in §63.7540(a)(14) for a mercury CEMS and §63.7540(a)(15) for a HCl CEMS.

(3) For a new unit, you must complete the initial performance evaluation of the CEMS by the latest of the dates specified in paragraph (l)(3)(i) through (iii) of this section.

(i) No later than July 30, 2013.

(ii) No later 180 days after the date of initial startup.

(iii) No later 180 days after notifying the Administrator before starting to use the CEMS in place of performance testing or fuel analysis to demonstrate compliance.

(4) For an existing unit, you must complete the initial performance evaluation by the latter of the two dates specified in paragraph (l)(4)(i) and (ii) of this section.

(i) No later than July 29, 2016.

(ii) No later 180 days after notifying the Administrator before starting to use the CEMS in place of performance testing or fuel analysis to demonstrate compliance.

(5) Compliance with the applicable emissions limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emissions rates using the continuous monitoring system outlet data. The 30-day rolling arithmetic average emission rate (lb/MMBtu) shall be calculated using the equations in EPA Reference Method 19 at 40 CFR part 60, appendix A-7, but substituting the mercury or HCl concentration for the pollutant concentrations normally used in Method 19.

(6) Collect CEMS hourly averages for all operating hours on a 30-day rolling average basis. Collect at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

(7) The one-hour arithmetic averages required shall be expressed in lb/MMBtu and shall be used to calculate the boiler 30-day and 10-day rolling average emissions.

(8) You are allowed to substitute the use of the PM, mercury or HCl CEMS for the applicable fuel analysis, annual performance test, and operating limits specified in Table 4 to this subpart to demonstrate compliance with the PM, mercury or HCl emissions limit, and if you are using an acid gas wet scrubber or dry sorbent injection control technology to comply with the HCl emission limit, you are allowed to substitute the use of a sulfur dioxide (SO_2) CEMS for the applicable fuel analysis, annual performance

test, and operating limits specified in Table 4 to this subpart to demonstrate compliance with HCl emissions limit.

(m) If your unit is subject to a HCl emission limit in Tables 1, 2, or 11 through 13 of this subpart and you have an acid gas wet scrubber or dry sorbent injection control technology and you use an SO_2 CEMS, you must install the monitor at the outlet of the boiler or process heater, downstream of all emission control devices, and you must install, certify, operate, and maintain the CEMS according to part 75 of this chapter.

(1) The SO_2 CEMS must be installed by the compliance date specified in §63.7495.

(2) For on-going quality assurance (QA), the SO_2 CEMS must meet the applicable daily, quarterly, and semiannual or annual requirements in sections 2.1 through 2.3 of appendix B to part 75 of this chapter, with the following addition: You must perform the linearity checks required in section 2.2 of appendix B to part 75 of this chapter if the SO_2 CEMS has a span value of 30 ppm or less.

(3) For a new unit, the initial performance evaluation shall be completed no later than July 30, 2013, or 180 days after the date of initial startup, whichever is later. For an existing unit, the initial performance evaluation shall be completed no later than July 29, 2016.

(4) For purposes of collecting SO_2 data, you must operate the SO_2 CEMS as specified in §63.7535(b). You must use all the data collected during all periods in calculating data averages and assessing compliance, except that you must exclude certain data as specified in §63.7535(c). Periods when SO_2 data are unavailable may constitute monitoring deviations as specified in §63.7535(d).

(5) Collect CEMS hourly averages for all operating hours on a 30-day rolling average basis.

(6) Use only unadjusted, quality-assured SO_2 concentration values in the emissions calculations; do not apply bias adjustment factors to the part 75 SO_2 data and do not use part 75 substitute data values.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7171, Jan. 31, 2013]

§63.7530 How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?

(a) You must demonstrate initial compliance with each emission limit that applies to you by conducting initial performance tests and fuel analyses and establishing operating limits, as applicable, according to §63.7520, paragraphs (b) and (c) of this section, and Tables 5 and 7 to this subpart. The requirement to conduct a fuel analysis is not applicable for units that burn a single type of fuel, as specified by §63.7510(a)(2)(i). If applicable, you must also install, operate, and maintain all applicable CMS (including CEMS, COMS, and CPMS) according to §63.7525.

(b) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Table 4 to this subpart that applies to you according to the requirements in §63.7520, Table 7 to this subpart, and paragraph (b)(4) of this section, as applicable. You must also conduct fuel analyses according to §63.7521 and establish maximum fuel pollutant input levels according to paragraphs (b)(1) through (3) of this section, as applicable, and as specified in §63.7510(a)(2). (Note that §63.7510(a)(2) exempts certain fuels from the fuel analysis requirements.) However, if you switch fuel(s) and cannot show that the new fuel(s) does (do) not increase the chlorine, mercury, or TSM input into the unit through the results of fuel analysis, then you must repeat the performance test to demonstrate compliance while burning the new fuel(s).

(1) You must establish the maximum chlorine fuel input (Clinput) during the initial fuel analysis according to the procedures in paragraphs (b)(1)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the fuel analysis for hydrogen chloride, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (Ci).

(iii) You must establish a maximum chlorine input level using Equation 7 of this section.

$$Clinput = \sum_{i=1}^{n} (Ci \times Qi) \quad \text{(Eq. 7)}$$

Where:

Clinput = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.

Ci = Arithmetic average concentration of chlorine in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

(2) You must establish the maximum mercury fuel input level (Mercuryinput) during the initial fuel analysis using the procedures in paragraphs (b)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Qi) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HGi).

(iii) You must establish a maximum mercury input level using Equation 8 of this section.

$$Mercuryinput = \sum_{i=1}^{n} (HGi \times Qi) \quad \text{(Eq. 8)}$$

Where:

Mercuryinput = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.

HGi = Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

(3) If you opt to comply with the alternative TSM limit, you must establish the maximum TSM fuel input (TSMinput) for solid or liquid fuels during the initial fuel analysis according to the procedures in paragraphs (b)(3)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.

(ii) During the fuel analysis for TSM, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of TSM, and the average TSM concentration of each fuel type burned (TSMi).

(iii) You must establish a maximum TSM input level using Equation 9 of this section.

$$TSMinput = \sum_{i=1}^{n} (TSMi \times Qi) \qquad \text{(Eq. 9)}$$

Where:

TSMinput = Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu.

TSMi = Arithmetic average concentration of TSM in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(4) You must establish parameter operating limits according to paragraphs (b)(4)(i) through (ix) of this section. As indicated in Table 4 to this subpart, you are not required to establish and comply with the operating parameter limits when you are using a CEMS to monitor and demonstrate compliance with the applicable emission limit for that control device parameter.

(i) For a wet acid gas scrubber, you must establish the minimum scrubber effluent pH and liquid flow rate as defined in §63.7575, as your operating limits during the performance test during which you demonstrate compliance with your applicable limit. If you use a wet scrubber and you conduct separate performance tests for HCl and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flow rate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flow rate operating limit at the higher of the minimum values established during the performance tests.

(ii) For any particulate control device (e.g., ESP, particulate wet scrubber, fabric filter) for which you use a PM CPMS, you must establish your PM CPMS operating limit and determine compliance with it according to paragraphs (b)(4)(ii)(A) through (F) of this section.

(A) Determine your operating limit as the average PM CPMS output value recorded during the most recent performance test run demonstrating compliance with the filterable PM emission limit or at the PM CPMS output value corresponding to 75 percent of the emission limit if your PM performance test demonstrates compliance below 75 percent of the emission limit. You must verify an existing or establish

a new operating limit after each repeated performance test. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(*1*) Your PM CPMS must provide a 4-20 milliamp output and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps.

(*2*) Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to at least two times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to two times your allowable emission limit.

(*3*) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp output values from the PM CPMS for the periods corresponding to the compliance test runs (e.g., average all your PM CPMS output values for three corresponding 2-hour Method 5I test runs).

(B) If the average of your three PM performance test runs are below 75 percent of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or performance test with the procedures in paragraphs (b)(4)(ii)(B)(*1*) through (*4*) of this section.

(*1*) Determine your instrument zero output with one of the following procedures:

(*i*) Zero point data for *in-situ* instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench.

(*ii*) Zero point data for *extractive* instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air.

(*iii*) The zero point may also be established by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (e.g., when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept.

(*iv*) If none of the steps in paragraphs (b)(4)(ii)(B)(*1*)(*i*) through (*iii*) of this section are possible, you must use a zero output value provided by the manufacturer.

(*2*) Determine your PM CPMS instrument average in milliamps, and the average of your corresponding three PM compliance test runs, using equation 10.

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} X_i, \bar{y} = \frac{1}{n}\sum_{i=1}^{n} Y_i \qquad \text{(Eq. 10)}$$

Where:

X_i = the PM CPMS data points for the three runs constituting the performance test,

Y_i = the PM concentration value for the three runs constituting the performance test, and

n = the number of data points.

(*3*) With your instrument zero expressed in milliamps, your three run average PM CPMS milliamp value, and your three run average PM concentration from your three compliance tests, determine a relationship of lb/MMBtu per milliamp with equation 11.

$$R = \frac{Y_1}{(X_1 - z)} \qquad \text{(Eq. 11)}$$

Where:

R = the relative lb/MMBtu per milliamp for your PM CPMS,

Y_1 = the three run average lb/MMBtu PM concentration,

X_1 = the three run average milliamp output from you PM CPMS, and

z = the milliamp equivalent of your instrument zero determined from (B)(i).

(*4*) Determine your source specific 30-day rolling average operating limit using the lb/MMBtu per milliamp value from Equation 11 in equation 12, below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit.

$$O_l = z + \frac{0.75(L)}{R} \qquad \text{(Eq. 12)}$$

Where:

O_l = the operating limit for your PM CPMS on a 30-day rolling average, in milliamps.

L = your source emission limit expressed in lb/MMBtu,

z = your instrument zero in milliamps, determined from (B)(i), and

R = the relative lb/MMBtu per milliamp for your PM CPMS, from Equation 11.

(C) If the average of your three PM compliance test runs is at or above 75 percent of your PM emission limit you must determine your 30-day rolling average operating limit by averaging the PM CPMS milliamp output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using equation 13 and you must submit all compliance test and PM CPMS data according to the reporting requirements in paragraph (b)(4)(ii)(F) of this section.

$$O_h = \frac{1}{n}\sum_{i=1}^{n} X_i \qquad \text{(Eq. 13)}$$

Where:

X_i = the PM CPMS data points for all runs i,

n = the number of data points, and

O_h = your site specific operating limit, in milliamps.

(D) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30-day rolling average basis, updated at the end of each new operating hour. Use Equation 14 to determine the 30-day rolling average.

$$30-\text{day} = \frac{\sum_{i=1}^{n} Hpvi}{n} \qquad \text{(Eq. 14)}$$

Where:

30-day = 30-day average.

Hpvi = is the hourly parameter value for hour i

n = is the number of valid hourly parameter values collected over the previous 720 operating hours.

(E) Use EPA Method 5 of appendix A to part 60 of this chapter to determine PM emissions. For each performance test, conduct three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur. Conduct each test run to collect a minimum sample volume specified in Tables 1, 2, or 11 through 13 to this subpart, as applicable, for determining compliance with a new source limit or an existing source limit. Calculate the average of the results from three runs to determine compliance. You need not determine the PM collected in the impingers ("back half") of the Method 5 particulate sampling train to demonstrate compliance with the PM standards of this subpart. This shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(F) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run. (iii) For a particulate wet scrubber, you must establish the minimum pressure drop and liquid flow rate as defined in §63.7575, as your operating limits during the three-run performance test during which you demonstrate compliance with your applicable limit. If you use a wet scrubber and you conduct separate performance tests for PM and TSM emissions, you must establish one set of minimum scrubber liquid flow rate and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flow rate and pressure drop operating limits at the higher of the minimum values established during the performance tests.

(iii) For an electrostatic precipitator (ESP) operated with a wet scrubber, you must establish the minimum total secondary electric power input, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit. (These operating limits do not apply to ESP that are operated as dry controls without a wet scrubber.)

(iv) For a dry scrubber, you must establish the minimum sorbent injection rate for each sorbent, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit.

(v) For activated carbon injection, you must establish the minimum activated carbon injection rate, as defined in §63.7575, as your operating limit during the three-run performance test during which you demonstrate compliance with your applicable limit.

(vi) The operating limit for boilers or process heaters with fabric filters that demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alert is not activated more than 5 percent of the operating time during a 6-month period.

(vii) For a minimum oxygen level, if you conduct multiple performance tests, you must set the minimum oxygen level at the lower of the minimum values established during the performance tests.

(viii) The operating limit for boilers or process heaters that demonstrate continuous compliance with the HCl emission limit using a SO_2 CEMS is to install and operate the SO_2 according to the requirements in §63.7525(m) establish a maximum SO_2 emission rate equal to the highest hourly average SO_2 measurement during the most recent three-run performance test for HCl.

(c) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (c)(1) through (5) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided t-statistic test described in Equation 15 of this section.

$$P90 = mean + (SD \times t) \quad \text{(Eq. 15)}$$

Where:

P90 = 90th percentile confidence level pollutant concentration, in pounds per million Btu.

Mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

SD = Standard deviation of the mean of pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu. SD is calculated as the sample standard deviation divided by the square root of the number of samples.

t = t distribution critical value for 90th percentile ($t_{0.1}$) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a t-Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 16 of this section must not exceed the applicable emission limit for HCl.

$$HCl = \sum_{i=1}^{n} (Ci90 \times Qi \times 1.028) \quad \text{(Eq. 16)}$$

Where:

HCl = HCl emission rate from the boiler or process heater in units of pounds per million Btu.

Ci90 = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 11 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of HCl to chlorine.

(4) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 17 of this section must not exceed the applicable emission limit for mercury.

$$Mercury = \sum_{i=1}^{n} \left(Hgi90 \times Qi\right) \qquad \text{(Eq. 17)}$$

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

Hgi90 = 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million Btu as calculated according to Equation 11 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(5) To demonstrate compliance with the applicable emission limit for TSM for solid or liquid fuels, the TSM emission rate that you calculate for your boiler or process heater from solid fuels using Equation 18 of this section must not exceed the applicable emission limit for TSM.

$$Metals = \sum_{i=1}^{n} \left(TSM90i \times Qi\right) \qquad \text{(Eq. 18)}$$

Where:

Metals = TSM emission rate from the boiler or process heater in units of pounds per million Btu.

TSMi90 = 90th percentile confidence level concentration of TSM in fuel, i, in units of pounds per million Btu as calculated according to Equation 11 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest TSM content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest TSM content.

(d) If you own or operate an existing unit with a heat input capacity of less than 10 million Btu per hour or a unit in the unit designed to burn gas 1 subcategory, you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the unit.

(e) You must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 to this subpart and is an accurate depiction of your facility at the time of the assessment.

(f) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).

(g) If you elect to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel as defined in §63.7575, you must conduct an initial fuel specification analyses according to §63.7521(f) through (i) and according to the frequency listed in §63.7540(c) and maintain records of the results of the testing as outlined in §63.7555(g). For samples where the initial mercury specification has not been exceeded, you will include a signed certification with the Notification of Compliance Status that the initial fuel specification test meets the gas specification outlined in the definition of other gas 1 fuels.

(h) If you own or operate a unit subject to emission limits in Tables 1 or 2 or 11 through 13 to this subpart, you must meet the work practice standard according to Table 3 of this subpart. During startup and shutdown, you must only follow the work practice standards according to item 5 of Table 3 of this subpart.

(i) If you opt to comply with the alternative SO_2 CEMS operating limit in Tables 4 and 8 to this subpart, you may do so only if your affected boiler or process heater:

(1) Has a system using wet scrubber or dry sorbent injection and SO_2 CEMS installed on the unit; and

(2) At all times, you operate the wet scrubber or dry sorbent injection for acid gas control on the unit consistent with §63.7500(a)(3); and

(3) You establish a unit-specific maximum SO_2 operating limit by collecting the minimum hourly SO_2 emission rate on the SO_2 CEMS during the paired 3-run test for HCl. The maximum SO_2 operating limit is equal to the highest hourly average SO_2 concentration measured during the most recent HCl performance test.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7174, Jan. 31, 2013]

§63.7533 Can I use efficiency credits earned from implementation of energy conservation measures to comply with this subpart?

(a) If you elect to comply with the alternative equivalent output-based emission limits, instead of the heat input-based limits listed in Table 2 to this subpart, and you want to take credit for implementing energy conservation measures identified in an energy assessment, you may demonstrate compliance using efficiency credits according to the procedures in this section. You may use this compliance approach for an existing affected boiler for demonstrating initial compliance according to §63.7522(e) and for demonstrating monthly compliance according to §63.7522(f). Owners or operators using this compliance approach must establish an emissions benchmark, calculate and document the efficiency credits, develop an Implementation Plan, comply with the general reporting requirements, and apply the efficiency credit according to the procedures in paragraphs (b) through (f) of this section. You cannot use this compliance approach for a new or reconstructed affected boiler. Additional guidance from the Department of Energy on efficiency credits is available at: *http://www.epa.gov/ttn/atw/boiler/boilerpg.html.*

(b) For each existing affected boiler for which you intend to apply emissions credits, establish a benchmark from which emission reduction credits may be generated by determining the actual annual fuel heat input to the affected boiler before initiation of an energy conservation activity to reduce energy demand (*i.e.,* fuel usage) according to paragraphs (b)(1) through (4) of this section. The benchmark shall be expressed in trillion Btu per year heat input.

(1) The benchmark from which efficiency credits may be generated shall be determined by using the most representative, accurate, and reliable process available for the source. The benchmark shall be established for a one-year period before the date that an energy demand reduction occurs, unless it can be demonstrated that a different time period is more representative of historical operations.

(2) Determine the starting point from which to measure progress. Inventory all fuel purchased and generated on-site (off-gases, residues) in physical units (MMBtu, million cubic feet, etc.).

(3) Document all uses of energy from the affected boiler. Use the most recent data available.

(4) Collect non-energy related facility and operational data to normalize, if necessary, the benchmark to current operations, such as building size, operating hours, etc. If possible, use actual data that are current and timely rather than estimated data.

(c) Efficiency credits can be generated if the energy conservation measures were implemented after January 1, 2008 and if sufficient information is available to determine the appropriate value of credits.

(1) The following emission points cannot be used to generate efficiency credits:

(i) Energy conservation measures implemented on or before January 1, 2008, unless the level of energy demand reduction is increased after January 1, 2008, in which case credit will be allowed only for change in demand reduction achieved after January 1, 2008.

(ii) Efficiency credits on shut-down boilers. Boilers that are shut down cannot be used to generate credits unless the facility provides documentation linking the permanent shutdown to energy conservation measures identified in the energy assessment. In this case, the bench established for the affected boiler to which the credits from the shutdown will be applied must be revised to include the benchmark established for the shutdown boiler.

(2) For all points included in calculating emissions credits, the owner or operator shall:

(i) Calculate annual credits for all energy demand points. Use Equation 19 to calculate credits. Energy conservation measures that meet the criteria of paragraph (c)(1) of this section shall not be included, except as specified in paragraph (c)(1)(i) of this section.

(3) Credits are generated by the difference between the benchmark that is established for each affected boiler, and the actual energy demand reductions from energy conservation measures implemented after January 1, 2008. Credits shall be calculated using Equation 19 of this section as follows:

(i) The overall equation for calculating credits is:

$$ECredits = \left(\sum_{i=1}^{n} EIS_{iactual} \right) \div EI_{baseline} \quad \text{(Eq. 19)}$$

Where:

ECredits = Energy Input Savings for all energy conservation measures implemented for an affected boiler, expressed as a decimal fraction of the baseline energy input.

$EIS_{iactual}$ = Energy Input Savings for each energy conservation measure, i, implemented for an affected boiler, million Btu per year.

$EI_{baseline}$ = Energy Input baseline for the affected boiler, million Btu per year.

n = Number of energy conservation measures included in the efficiency credit for the affected boiler.

(ii) [Reserved]

(d) The owner or operator shall develop, and submit for approval upon request by the Administrator, an Implementation Plan containing all of the information required in this paragraph for all boilers to be included in an efficiency credit approach. The Implementation Plan shall identify all existing affected boilers to be included in applying the efficiency credits. The Implementation Plan shall include a description of the energy conservation measures implemented and the energy savings generated from each measure and an explanation of the criteria used for determining that savings. If requested, you must submit the implementation plan for efficiency credits to the Administrator for review and approval no later than 180 days before the date on which the facility intends to demonstrate compliance using the efficiency credit approach.

(e) The emissions rate as calculated using Equation 20 of this section from each existing boiler participating in the efficiency credit option must be in compliance with the limits in Table 2 to this subpart at all times the affected unit is operating, following the compliance date specified in §63.7495.

(f) You must use Equation 20 of this section to demonstrate initial compliance by demonstrating that the emissions from the affected boiler participating in the efficiency credit compliance approach do not exceed the emission limits in Table 2 to this subpart.

$$E_{adj} = E_m \times (1 - ECredits) \quad \text{(Eq. 20)}$$

Where:

E_{adj} = Emission level adjusted by applying the efficiency credits earned, lb per million Btu steam output (or lb per MWh) for the affected boiler.

E_m = Emissions measured during the performance test, lb per million Btu steam output (or lb per MWh) for the affected boiler.

ECredits = Efficiency credits from Equation 19 for the affected boiler.

(g) As part of each compliance report submitted as required under §63.7550, you must include documentation that the energy conservation measures implemented continue to generate the credit for use in demonstrating compliance with the emission limits.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7178, Jan. 31, 2013]

CONTINUOUS COMPLIANCE REQUIREMENTS

§63.7535 Is there a minimum amount of monitoring data I must obtain?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.7505(d).

(b) You must operate the monitoring system and collect data at all required intervals at all times that each boiler or process heater is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods (see §63.8(c)(7) of this part), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

(c) You may not use data recorded during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. You must record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with your site-specific monitoring plan. You must use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system.

(d) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, do not use any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. You must calculate monitoring results using all other monitoring data collected while the process is operating. You must report all periods when the monitoring system is out of control in your annual report.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7179, Jan. 31, 2013]

§63.7540 How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit in Tables 1 and 2 or 11 through 13 to this subpart, the work practice standards in Table 3 to this subpart, and the operating limits in Table 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (19) of this section.

(1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of this subpart except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests.

(2) As specified in §63.7550(c), you must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in either of the following:

(i) Lower emissions of HCl, mercury, and TSM than the applicable emission limit for each pollutant, if you demonstrate compliance through fuel analysis.

(ii) Lower fuel input of chlorine, mercury, and TSM than the maximum values calculated during the last performance test, if you demonstrate compliance through performance testing.

(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis for a solid or liquid fuel and you plan to burn a new type of solid or liquid fuel, you must recalculate the HCl emission rate using Equation 12 of §63.7530 according to paragraphs (a)(3)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the HCl emission rate.

(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.

(iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 12 of §63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.

(4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 7 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 7 of §63.7530 are greater than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). In recalculating the maximum chlorine input and establishing the new operating limits, you are not required to conduct fuel analyses for and include the fuels described in §63.7510(a)(2)(i) through (iii).

(5) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 13 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate.

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 13 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(6) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 8 of §63.7530. If the results of recalculating the maximum mercury input using Equation 8 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the mercury emission rate.

(7) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alert and complete corrective actions as soon as practical, and operate and maintain the fabric filter system such that the periods which would cause an alert are no more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alert, the

time corrective action was initiated and completed, and a brief description of the cause of the alert and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the conditions exist for an alert. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alert time is counted. If corrective action is required, each alert shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alert time shall be counted as the actual amount of time taken to initiate corrective action.

(8) To demonstrate compliance with the applicable alternative CO CEMS emission limit listed in Tables 1, 2, or 11 through 13 to this subpart, you must meet the requirements in paragraphs (a)(8)(i) through (iv) of this section.

(i) Continuously monitor CO according to §§63.7525(a) and 63.7535.

(ii) Maintain a CO emission level below or at your applicable alternative CO CEMS-based standard in Tables 1 or 2 or 11 through 13 to this subpart at all times the affected unit is operating.

(iii) Keep records of CO levels according to §63.7555(b).

(iv) You must record and make available upon request results of CO CEMS performance audits, dates and duration of periods when the CO CEMS is out of control to completion of the corrective actions necessary to return the CO CEMS to operation consistent with your site-specific monitoring plan.

(9) The owner or operator of a boiler or process heater using a PM CPMS or a PM CEMS to meet requirements of this subpart shall install, certify, operate, and maintain the PM CPMS or PM CEMS in accordance with your site-specific monitoring plan as required in §63.7505(d).

(10) If your boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of this section. This frequency does not apply to limited-use boilers and process heaters, as defined in §63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a

dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of this section,

(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) A description of any corrective actions taken as a part of the tune-up; and

(C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

(11) If your boiler or process heater has a heat input capacity of less than 10 million Btu per hour (except as specified in paragraph (a)(12) of this section), you must conduct a biennial tune-up of the boiler or process heater as specified in paragraphs (a)(10)(i) through (vi) of this section to demonstrate continuous compliance.

(12) If your boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1; units designed to burn gas 2 (other); or units designed to burn light liquid subcategories, or meets the definition of limited-use boiler or process heater in §63.7575, you must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of this section to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph (a)(10)(i) of this section until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

(13) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

(14) If you are using a CEMS measuring mercury emissions to meet requirements of this subpart you must install, certify, operate, and maintain the mercury CEMS as specified in paragraphs (a)(14)(i) and (ii) of this section.

(i) Operate the mercury CEMS in accordance with performance specification 12A of 40 CFR part 60, appendix B or operate a sorbent trap based integrated monitor in accordance with performance specification 12B of 40 CFR part 60, appendix B. The duration of the performance test must be the maximum of 30 unit operating days or 720 hours. For each day in which the unit operates, you must obtain hourly mercury concentration data, and stack gas volumetric flow rate data.

(ii) If you are using a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the mercury mass emissions rate to the atmosphere according to the requirements of performance specifications 6 and 12A of 40 CFR part 60, appendix B, and quality assurance procedure 6 of 40 CFR part 60, appendix F.

(15) If you are using a CEMS to measure HCl emissions to meet requirements of this subpart, you must install, certify, operate, and maintain the HCl CEMS as specified in paragraphs (a)(15)(i) and (ii) of this section. This option for an affected unit takes effect on the date a final performance specification for an HCl CEMS is published in the FEDERAL REGISTER or the date of approval of a site-specific monitoring plan.

(i) Operate the continuous emissions monitoring system in accordance with the applicable performance specification in 40 CFR part 60, appendix B. The duration of the performance test must be the maximum of 30 unit operating days or 720 hours. For each day in which the unit operates, you must obtain hourly HCl concentration data, and stack gas volumetric flow rate data.

(ii) If you are using a HCl CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the HCl mass emissions rate to the atmosphere according to the requirements of the applicable performance specification of 40 CFR part 60, appendix B, and the quality assurance procedures of 40 CFR part 60, appendix F.

(16) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 9 of §63.7530. If the results of recalculating the maximum TSM input using Equation 9 of §63.7530 are higher than the maximum total selected input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b). You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the TSM emission rate.

(17) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis for solid or liquid fuels, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 14 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section. You are not required to conduct fuel analyses for the fuels described in §63.7510(a)(2)(i) through (iii). You may exclude the fuels described in §63.7510(a)(2)(i) through (iii) when recalculating the TSM emission rate.

(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of TSM.

(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 14 of §63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.

(18) If you demonstrate continuous PM emissions compliance with a PM CPMS you will use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. You will conduct your performance test using the test method criteria in Table 5 of this subpart. You will use the PM CPMS to demonstrate continuous compliance with this operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

(i) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30-day rolling average basis, updated at the end of each new boiler or process heater operating hour.

(ii) For any deviation of the 30-day rolling PM CPMS average value from the established operating parameter limit, you must:

(A) Within 48 hours of the deviation, visually inspect the air pollution control device (APCD);

(B) If inspection of the APCD identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and

(C) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph.

(iii) PM CPMS deviations from the operating limit leading to more than four required performance tests in a 12-month operating period constitute a separate violation of this subpart.

(19) If you choose to comply with the PM filterable emissions limit by using PM CEMS you must install, certify, operate, and maintain a PM CEMS and record the output of the PM CEMS as specified in paragraphs (a)(19)(i) through (vii) of this section. The compliance limit will be expressed as a 30-day rolling average of the numerical emissions limit value applicable for your unit in Tables 1 or 2 or 11 through 13 of this subpart.

(i) Install and certify your PM CEMS according to the procedures and requirements in Performance Specification 11—Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in Appendix B to part 60 of this chapter, using test criteria outlined in Table V of this rule. The reportable measurement output from the PM CEMS must be expressed in units of the applicable emissions limit (e.g., lb/MMBtu, lb/MWh).

(ii) Operate and maintain your PM CEMS according to the procedures and requirements in Procedure 2— Quality Assurance Requirements for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in Appendix F to part 60 of this chapter.

(A) You must conduct the relative response audit (RRA) for your PM CEMS at least once annually.

(B) You must conduct the relative correlation audit (RCA) for your PM CEMS at least once every 3 years.

(iii) Collect PM CEMS hourly average output data for all boiler operating hours except as indicated in paragraph (i) of this section.

(iv) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CEMS output data collected during all nonexempt boiler or process heater operating hours.

(v) You must collect data using the PM CEMS at all times the unit is operating and at the intervals specified this paragraph (a), except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities.

(vi) You must use all the data collected during all boiler or process heater operating hours in assessing the compliance with your operating limit except:

(A) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities conducted during monitoring system malfunctions in calculations and report any such periods in your annual deviation report;

(B) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or control activities conducted during out of control periods in calculations used to report emissions or operating levels and report any such periods in your annual deviation report;

(C) Any data recorded during periods of startup or shutdown.

(vii) You must record and make available upon request results of PM CEMS system performance audits, dates and duration of periods when the PM CEMS is out of control to completion of the corrective actions necessary to return the PM CEMS to operation consistent with your site-specific monitoring plan.

(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 13 to this subpart that apply to you. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) If you elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, you must follow the sampling frequency specified in paragraphs (c)(1) through (4) of this section and conduct this sampling according to the procedures in §63.7521(f) through (i).

(1) If the initial mercury constituents in the gaseous fuels are measured to be equal to or less than half of the mercury specification as defined in §63.7575, you do not need to conduct further sampling.

(2) If the initial mercury constituents are greater than half but equal to or less than 75 percent of the mercury specification as defined in §63.7575, you will conduct semi-annual sampling. If 6 consecutive semi-annual fuel analyses demonstrate 50 percent or less of the mercury specification, you do not need to conduct further sampling. If any semi-annual sample exceeds 75 percent of the mercury specification, you must return to monthly sampling for that fuel, until 12 months of fuel analyses again are less than 75 percent of the compliance level.

(3) If the initial mercury constituents are greater than 75 percent of the mercury specification as defined in §63.7575, you will conduct monthly sampling. If 12 consecutive monthly fuel analyses demonstrate 75 percent or less of the mercury specification, you may decrease the fuel analysis frequency to semi-annual for that fuel.

(4) If the initial sample exceeds the mercury specification as defined in §63.7575, each affected boiler or process heater combusting this fuel is not part of the unit designed to burn gas 1 subcategory and must be in compliance with the emission and operating limits for the appropriate subcategory. You may elect to conduct additional monthly sampling while complying with these emissions and operating limits to demonstrate that the fuel qualifies as another gas 1 fuel. If 12 consecutive monthly fuel analyses samples are at or below the mercury specification as defined in §63.7575, each affected boiler or process heater combusting the fuel can elect to switch back into the unit designed to burn gas 1 subcategory until the mercury specification is exceeded.

(d) For startup and shutdown, you must meet the work practice standards according to item 5 of Table 3 of this subpart.

[78 FR 7179, Jan. 31, 2013]

§63.7541 How do I demonstrate continuous compliance under the emissions averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (5) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.7522(f) and (g).

(2) You must maintain the applicable opacity limit according to paragraphs (a)(2)(i) and (ii) of this section.

(i) For each existing unit participating in the emissions averaging option that is equipped with a dry control system and not vented to a common stack, maintain opacity at or below the applicable limit.

(ii) For each group of units participating in the emissions averaging option where each unit in the group is equipped with a dry control system and vented to a common stack that does not receive emissions from non-affected units, maintain opacity at or below the applicable limit at the common stack.

(3) For each existing unit participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 30-day rolling average parameter values at or above the operating limits established during the most recent performance test.

(4) For each existing unit participating in the emissions averaging option that has an approved alternative operating parameter, maintain the 30-day rolling average parameter values consistent with the approved monitoring plan.

(5) For each existing unit participating in the emissions averaging option venting to a common stack configuration containing affected units from other subcategories, maintain the appropriate operating limit for each unit as specified in Table 4 to this subpart that applies.

(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (5) of this section is a deviation.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7182, Jan. 31, 2013]

NOTIFICATION, REPORTS, AND RECORDS

§63.7545 What notifications must I submit and when?

(a) You must submit to the Administrator all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you startup your affected source before January 31, 2013, you must submit an Initial Notification not later than 120 days after January 31, 2013.

(c) As specified in §63.9(b)(4) and (5), if you startup your new or reconstructed affected source on or after January 31, 2013, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.

(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable. If you are not required to conduct an initial compliance demonstration as specified in §63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8).

(1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.

(2) Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits, and including:

(i) Identification of whether you are complying with the PM emission limit or the alternative TSM emission limit.

(ii) Identification of whether you are complying with the output-based emission limits or the heat input-based (i.e., lb/MMBtu or ppm) emission limits,

(3) A summary of the maximum CO emission levels recorded during the performance test to show that you have met any applicable emission standard in Tables 1, 2, or 11 through 13 to this subpart, if you are not using a CO CEMS to demonstrate compliance.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing, a CEMS, or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging and identification of whether you plan to demonstrate compliance by using efficiency credits through energy conservation:

(i) If you plan to demonstrate compliance by emission averaging, report the emission level that was being achieved or the control technology employed on January 31, 2013.

(ii) [Reserved]

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) If you had a deviation from any emission limit, work practice standard, or operating limit, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

(8) In addition to the information required in §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) “This facility complies with the required initial tune-up according to the procedures in §63.7540(a)(10)(i) through (vi).”

(ii) “This facility has had an energy assessment performed according to §63.7530(e).”

(iii) Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: “No secondary materials that are solid waste were combusted in any affected unit.”

(f) If you operate a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to this subpart, and you intend to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of this part, part 60, 61, or 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in §63.7575, you must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected unit.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

(g) If you intend to commence or recommence combustion of solid waste, you must provide 30 days prior notice of the date upon which you will commence or recommence combustion of solid waste. The notification must identify:

(1) The name of the owner or operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice.

(2) The currently applicable subcategories under this subpart.

(3) The date on which you became subject to the currently applicable emission limits.

(4) The date upon which you will commence combusting solid waste.

(h) If you have switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, you must provide notice of the date upon which you switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:

(1) The name of the owner or operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice.

(2) The currently applicable subcategory under this subpart.

(3) The date upon which the fuel switch or physical change occurred.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7183, Jan. 31, 2013]

§63.7550 What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report, according to paragraph (h) of this section, by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (4) of this section. For units that are subject only to a requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or operating limits, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of this section, instead of a semi-annual compliance report.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in §63.7495 and ending on July 31 or January 31, whichever date is the first date that occurs at least 180 days (or 1, 2, or 5 years, as applicable, if submitting an annual, biennial, or 5-year compliance report) after the compliance date that is specified for your source in §63.7495.

(2) The first compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in §63.7495. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31.

(4) Each subsequent compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than January 31.

(c) A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.

(1) If the facility is subject to a the requirements of a tune up they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv) and (xiv) of this section.

(2) If a facility is complying with the fuel analysis they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv), (vi), (x), (xi), (xiii), (xv) and paragraph (d) of this section.

(3) If a facility is complying with the applicable emissions limit with performance testing they must submit a compliance report with the information in (c)(5)(i) through (iv), (vi), (vii), (ix), (xi), (xiii), (xv) and paragraph (d) of this section.

(4) If a facility is complying with an emissions limit using a CMS the compliance report must contain the information required in paragraphs (c)(5)(i) through (vi), (xi), (xiii), (xv) through (xvii), and paragraph (e) of this section.

(5)(i) Company and Facility name and address.

(ii) Process unit information, emissions limitations, and operating parameter limitations.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) The total operating time during the reporting period.

(v) If you use a CMS, including CEMS, COMS, or CPMS, you must include the monitoring equipment manufacturer(s) and model numbers and the date of the last CMS certification or audit.

(vi) The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.

(vii) If you are conducting performance tests once every 3 years consistent with §63.7515(b) or (c), the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.

(viii) A statement indicating that you burned no new types of fuel in an individual boiler or process heater subject to an emission limit. Or, if you did burn a new type of fuel and are subject to a HCl emission limit, you must submit the calculation of chlorine input, using Equation 7 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 12 of §63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a mercury emission limit, you must submit the calculation of mercury input, using Equation 8 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 13 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a TSM emission limit, you must submit the calculation of TSM input, using Equation 9 of §63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate, using Equation 14 of §63.7530, that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(ix) If you wish to burn a new type of fuel in an individual boiler or process heater subject to an emission limit and you cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of §63.7530 or the maximum mercury input operating limit using Equation 8 of §63.7530, or the maximum TSM input operating limit using Equation 9 of §63.7530 you must include in

the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(x) A summary of any monthly fuel analyses conducted to demonstrate compliance according to §§63.7521 and 63.7530 for individual boilers or process heaters subject to emission limits, and any fuel specification analyses conducted according to §§63.7521(f) and 63.7530(g).

(xi) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, a statement that there were no deviations from the emission limits or operating limits during the reporting period.

(xii) If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in §63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period.

(xiii) If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by you during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.

(xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(xv) If you plan to demonstrate compliance by emission averaging, certify the emission level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in §63.7545(e)(5)(i).

(xvi) For each reporting period, the compliance reports must include all of the calculated 30 day rolling average values based on the daily CEMS (CO and mercury) and CPMS (PM CPMS output, scrubber pH, scrubber liquid flow rate, scrubber pressure drop) data.

(xvii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(d) For each deviation from an emission limit or operating limit in this subpart that occurs at an individual boiler or process heater where you are not using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (d)(1) through (3) of this section.

(1) A description of the deviation and which emission limit or operating limit from which you deviated.

(2) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(3) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.

(e) For each deviation from an emission limit, operating limit, and monitoring requirement in this subpart occurring at an individual boiler or process heater where you are using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (e)(1) through (9) of this section. This includes any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) A brief description of the source for which there was a deviation.

(9) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f)-(g) [Reserved]

(h) You must submit the reports according to the procedures specified in paragraphs (h)(1) through (3) of this section.

(1) Within 60 days after the date of completing each performance test (defined in §63.2) as required by this subpart you must submit the results of the performance tests, including any associated fuel analyses, required by this subpart and the compliance reports required in §63.7550(b) to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the Administrator, you must also submit these reports, including the confidential business information, to the Administrator in the format specified by the Administrator. For

any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator.

(2) Within 60 days after the date of completing each CEMS performance evaluation test (defined in 63.2) you must submit the relative accuracy test audit (RATA) data to the EPA's Central Data Exchange by using CEDRI as mentioned in paragraph (h)(1) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation in paper submissions to the Administrator.

(3) You must submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report you must submit the report to the Administrator at the appropriate address listed in §63.13. At the discretion of the Administrator, you must also submit these reports, to the Administrator in the format specified by the Administrator.

[78 FR 7183, Jan. 31, 2013]

§63.7555 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) and (2) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CEMS, COMS, and continuous monitoring system you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2)(vii) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped.

(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies to you.

(d) For each boiler or process heater subject to an emission limit in Tables 1, 2, or 11 through 13 to this subpart, you must also keep the applicable records in paragraphs (d)(1) through (11) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) If you combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1) and (2) of this chapter, you must keep a record that documents how the secondary material meets each of the legitimacy criteria under §241.3(d)(1) of this chapter. If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4) of this chapter, you must keep records as to how the operations that produced the fuel satisfy the definition of processing in §241.2 of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c) of this chapter, you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per §241.4 of this chapter, you must keep records documenting that the material is listed as a non-waste under §241.4(a) of this chapter. Units exempt from the incinerator standards under section 129(g)(1) of the Clean Air Act because they are qualifying facilities burning a homogeneous waste stream do not need to maintain the records described in this paragraph (d)(2).

(3) For units in the limited use subcategory, you must keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and fuel use records for the days the boiler or process heater was operating.

(4) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 12 of §63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 13 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(6) If, consistent with §63.7515(b), you choose to stack test less frequently than annually, you must keep a record that documents that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit (or, in specific instances noted in Tables 1 and 2 or 11 through 13 to this subpart, less than the applicable emission limit), and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

(7) Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment.

(8) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the

malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(9) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 9 of §63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 14 of §63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater.

(10) You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.

(11) You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.

(e) If you elect to average emissions consistent with §63.7522, you must additionally keep a copy of the emission averaging implementation plan required in §63.7522(g), all calculations required under §63.7522, including monthly records of heat input or steam generation, as applicable, and monitoring records consistent with §63.7541.

(f) If you elect to use efficiency credits from energy conservation measures to demonstrate compliance according to §63.7533, you must keep a copy of the Implementation Plan required in §63.7533(d) and copies of all data and calculations used to establish credits according to §63.7533(b), (c), and (f).

(g) If you elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, you must maintain monthly records (or at the frequency required by §63.7540(c)) of the calculations and results of the fuel specification for mercury in Table 6.

(h) If you operate a unit in the unit designed to burn gas 1 subcategory that is subject to this subpart, and you use an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under this part, other gas 1 fuel, or gaseous fuel subject to another subpart of this part or part 60, 61, or 65, you must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies.

(i) You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.

(j) You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7185, Jan. 31, 2013]

§63.7560 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off site for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

§63.7565 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§63.7570 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the EPA, or an Administrator such as your state, local, or tribal agency. If the EPA Administrator has delegated authority to your state, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your state, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a state, local, or tribal agency under 40 CFR part 63, subpart E, the authorities listed in paragraphs (b)(1) through (5) of this section are retained by the EPA Administrator and are not transferred to the state, local, or tribal agency, however, the EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.7500(a) and (b) under §63.6(g).

(2) Approval of alternative opacity emission limits in §63.7500(a) under §63.6(h)(9).

(3) Approval of major change to test methods in Table 5 to this subpart under §63.7(e)(2)(ii) and (f) and as defined in §63.90, and alternative analytical methods requested under §63.7521(b)(2).

(4) Approval of major change to monitoring under §63.8(f) and as defined in §63.90, and approval of alternative operating parameters under §63.7500(a)(2) and §63.7522(g)(2).

(5) Approval of major change to recordkeeping and reporting under §63.10(e) and as defined in §63.90.

[76 FR 15664, Mar. 21, 2011 as amended at 78 FR 7186, Jan. 31, 2013]

§63.7575 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2 (the General Provisions), and in this section as follows:

10-day rolling average means the arithmetic mean of the previous 240 hours of valid operating data. Valid data excludes hours during startup and shutdown, data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities, and periods when this unit is not operating. The 240 hours should be consecutive, but not necessarily continuous if operations were intermittent.

30-day rolling average means the arithmetic mean of the previous 720 hours of valid operating data. Valid data excludes hours during startup and shutdown, data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities, and periods when this unit is not operating. The 720 hours should be consecutive, but not necessarily continuous if operations were intermittent.

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

Average annual heat input rate means total heat input divided by the hours of operation for the 12 months preceding the compliance demonstration.

Bag leak detection system means a group of instruments that are capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.,* baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Benchmark means the fuel heat input for a boiler or process heater for the one-year period before the date that an energy demand reduction occurs, unless it can be demonstrated that a different time period is more representative of historical operations.

Biodiesel means a mono-alkyl ester derived from biomass and conforming to ASTM D6751-11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels (incorporated by reference, see §63.14).

Biomass or bio-based solid fuel means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue; wood products (*e.g.,* trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging

residues (slash), nut and grain hulls and chaff (*e.g.,* almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition of biomass is not intended to suggest that these materials are or are not solid waste.

Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total annual gas volume from blast furnace gas.

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in §241.3 of this chapter, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Waste heat boilers are excluded from this definition.

Boiler system means the boiler and associated components, such as, the feed water system, the combustion air system, the fuel system (including burners), blowdown system, combustion control systems, steam systems, and condensate return systems.

Calendar year means the period between January 1 and December 31, inclusive, for a given year.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by ASTM D388 (incorporated by reference, see §63.14), coal refuse, and petroleum coke. For the purposes of this subpart, this definition of “coal” includes synthetic fuels derived from coal, including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures. Coal derived gases are excluded from this definition.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, elementary and secondary schools, libraries, religious establishments, governmental buildings, hotels, restaurants, and laundries to provide electricity, steam, and/or hot water.

Common stack means the exhaust of emissions from two or more affected units through a single flue. Affected units with a common stack may each have separate air pollution control systems located before the common stack, or may have a single air pollution control system located after the exhausts come together in a single flue.

Cost-effective energy conservation measure means a measure that is implemented to improve the energy efficiency of the boiler or facility that has a payback (return of investment) period of 2 years or less.

Daily block average means the arithmetic mean of all valid emission concentrations or parameter levels recorded when a unit is operating measured over the 24-hour period from 12 a.m. (midnight) to 12 a.m. (midnight), except for periods of startup and shutdown or downtime.

Deviation. (1) *Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any applicable requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

(2) A deviation is not always a violation.

Dioxins/furans means tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §63.14) or diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §63.14), kerosene, and biodiesel as defined by the American Society of Testing and Materials in ASTM D6751-11b (incorporated by reference, see §60.14).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems used as control devices in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

Dutch oven means a unit having a refractory-walled cell connected to a conventional boiler setting. Fuel materials are introduced through an opening in the roof of the dutch oven and burn in a pile on its floor. Fluidized bed boilers are not part of the dutch oven design category.

Efficiency credit means emission reductions above those required by this subpart. Efficiency credits generated may be used to comply with the emissions limits. Credits may come from pollution prevention projects that result in reduced fuel use by affected units. Boilers that are shut down cannot be used to generate credits unless the facility provides documentation linking the permanent shutdown to implementation of the energy conservation measures identified in the energy assessment.

Electric utility steam generating unit (EGU) means a fossil fuel-fired combustion unit of more than 25 megawatts electric (MWe) that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 MWe output to any utility power distribution system for sale is considered an electric utility steam generating unit. To be “capable of combusting” fossil fuels, an EGU would need to have these fuels allowed in their operating permits and have the appropriate fuel handling facilities on-site or otherwise available (e.g., coal handling equipment, including coal storage area, belts and conveyers, pulverizers, etc.; oil storage facilities). In addition, fossil fuel-fired EGU means any EGU that fired fossil fuel for more than 10.0 percent of the average annual heat input in any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year after April 16, 2012.

Electrostatic precipitator (ESP) means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper. An electrostatic precipitator is usually a dry control system.

Energy assessment means the following for the emission units covered by this subpart:

(1) The energy assessment for facilities with affected boilers and process heaters with a combined heat input capacity of less than 0.3 trillion Btu (TBtu) per year will be 8 on-site technical labor hours in

length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 50 percent of the affected boiler(s) energy (e.g., steam, hot water, process heat, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing an 8-hour on-site energy assessment.

(2) The energy assessment for facilities with affected boilers and process heaters with a combined heat input capacity of 0.3 to 1.0 TBtu/year will be 24 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 33 percent of the energy (e.g., steam, hot water, process heat, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing a 24-hour on-site energy assessment.

(3) The energy assessment for facilities with affected boilers and process heaters with a combined heat input capacity greater than 1.0 TBtu/year will be up to 24 on-site technical labor hours in length for the first TBtu/yr plus 8 on-site technical labor hours for every additional 1.0 TBtu/yr not to exceed 160 on-site technical hours, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s), process heater(s), and any on-site energy use system(s) accounting for at least 20 percent of the energy (e.g., steam, process heat, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities.

(4) The on-site energy use systems serving as the basis for the percent of affected boiler(s) and process heater(s) energy production in paragraphs (1), (2), and (3) of this definition may be segmented by production area or energy use area as most logical and applicable to the specific facility being assessed (e.g., product X manufacturing area; product Y drying area; Building Z).

Energy management practices means the set of practices and procedures designed to manage energy use that are demonstrated by the facility's energy policies, a facility energy manager and other staffing responsibilities, energy performance measurement and tracking methods, an energy saving goal, action plans, operating procedures, internal reporting requirements, and periodic review intervals used at the facility.

Energy management program means a program that includes a set of practices and procedures designed to manage energy use that are demonstrated by the facility's energy policies, a facility energy manager and other staffing responsibilities, energy performance measurement and tracking methods, an energy saving goal, action plans, operating procedures, internal reporting requirements, and periodic review intervals used at the facility. Facilities may establish their program through energy management systems compatible with ISO 50001.

Energy use system includes the following systems located on-site that use energy (steam, hot water, or electricity) provided by the affected boiler or process heater: process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air-conditioning systems; hot water systems; building envelop; and lighting; or other systems that use steam, hot water, process heat, or electricity provided by the affected boiler or process heater. Energy use systems are only those systems using energy clearly produced by affected boilers and process heaters.

Equivalent means the following only as this term is used in Table 6 to this subpart:

(1) An equivalent sample collection procedure means a published voluntary consensus standard or practice (VCS) or EPA method that includes collection of a minimum of three composite fuel samples, with each composite consisting of a minimum of three increments collected at approximately equal intervals over the test period.

(2) An equivalent sample compositing procedure means a published VCS or EPA method to systematically mix and obtain a representative subsample (part) of the composite sample.

(3) An equivalent sample preparation procedure means a published VCS or EPA method that: Clearly states that the standard, practice or method is appropriate for the pollutant and the fuel matrix; or is cited as an appropriate sample preparation standard, practice or method for the pollutant in the chosen VCS or EPA determinative or analytical method.

(4) An equivalent procedure for determining heat content means a published VCS or EPA method to obtain gross calorific (or higher heating) value.

(5) An equivalent procedure for determining fuel moisture content means a published VCS or EPA method to obtain moisture content. If the sample analysis plan calls for determining metals (especially the mercury, selenium, or arsenic) using an aliquot of the dried sample, then the drying temperature must be modified to prevent vaporizing these metals. On the other hand, if metals analysis is done on an “as received” basis, a separate aliquot can be dried to determine moisture content and the metals concentration mathematically adjusted to a dry basis.

(6) An equivalent pollutant (mercury, HCl) determinative or analytical procedure means a published VCS or EPA method that clearly states that the standard, practice, or method is appropriate for the pollutant and the fuel matrix and has a published detection limit equal or lower than the methods listed in Table 6 to this subpart for the same purpose.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse. A fabric filter is a dry control system.

Federally enforceable means all limitations and conditions that are enforceable by the EPA Administrator, including, but not limited to, the requirements of 40 CFR parts 60, 61, 63, and 65, requirements within any applicable state implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed boiler means a boiler utilizing a fluidized bed combustion process that is not a pulverized coal boiler.

Fluidized bed boiler with an integrated fluidized bed heat exchanger means a boiler utilizing a fluidized bed combustion where the entire tube surface area is located outside of the furnace section at the exit of the cyclone section and exposed to the flue gas stream for conductive heat transfer. This design applies only to boilers in the unit designed to burn coal/solid fossil fuel subcategory that fire coal refuse.

Fluidized bed combustion means a process where a fuel is burned in a bed of granulated particles, which are maintained in a mobile suspension by the forward flow of air and combustion products.

Fuel cell means a boiler type in which the fuel is dropped onto suspended fixed grates and is fired in a pile. The refractory-lined fuel cell uses combustion air preheating and positioning of secondary and tertiary air injection ports to improve boiler efficiency. Fluidized bed, dutch oven, pile burner, hybrid suspension grate, and suspension burners are not part of the fuel cell subcategory.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, sub-bituminous coal, lignite, anthracite, biomass, distillate oil, residual oil. Individual fuel types received from different suppliers are not considered new fuel types.

Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas and process gases that are regulated under another subpart of this part, or part 60, part 61, or part 65 of this chapter, are exempted from this definition.

Heat input means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, returned condensate, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.

Heavy liquid includes residual oil and any other liquid fuel not classified as a light liquid.

Hourly average means the arithmetic average of at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous, liquid, or biomass/bio-based solid fuel and is withdrawn for use external to the vessel. Hot water boilers (i.e., not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 million Btu per hour are included in this definition. The 120 U.S. gallon capacity threshold to be considered a hot water heater is independent of the 1.6 MMBtu/hr heat input capacity threshold for hot water boilers. Hot water heater also means a tankless unit that provides on demand hot water.

Hybrid suspension grate boiler means a boiler designed with air distributors to spread the fuel material over the entire width and depth of the boiler combustion zone. The biomass fuel combusted in these units exceeds a moisture content of 40 percent on an as-fired annual heat input basis. The drying and much of the combustion of the fuel takes place in suspension, and the combustion is completed on the grate or floor of the boiler. Fluidized bed, dutch oven, and pile burner designs are not part of the hybrid suspension grate boiler design category.

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

Light liquid includes distillate oil, biodiesel, or vegetable oil.

Limited-use boiler or process heater means any boiler or process heater that burns any amount of solid, liquid, or gaseous fuels and has a federally enforceable average annual capacity factor of no more than 10 percent.

Liquid fuel includes, but is not limited to, light liquid, heavy liquid, any form of liquid fuel derived from petroleum, used oil, liquid biofuels, biodiesel, vegetable oil, and comparable fuels as defined under 40 CFR 261.38.

Load fraction means the actual heat input of a boiler or process heater divided by heat input during the performance test that established the minimum sorbent injection rate or minimum activated carbon injection rate, expressed as a fraction (e.g., for 50 percent load the load fraction is 0.5).

Major source for oil and natural gas production facilities, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment, as defined in this section), and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) Emissions from processes, operations, or equipment that are not part of the same facility, as defined in this section, shall not be aggregated; and

(3) For facilities that are production field facilities, only HAP emissions from glycol dehydration units and storage vessels with the potential for flash emissions shall be aggregated for a major source determination. For facilities that are not production field facilities, HAP emissions from all HAP emission units shall be aggregated for a major source determination.

Metal process furnaces are a subcategory of process heaters, as defined in this subpart, which include natural gas-fired annealing furnaces, preheat furnaces, reheat furnaces, aging furnaces, heat treat furnaces, and homogenizing furnaces.

Million Btu (MMBtu) means one million British thermal units.

Minimum activated carbon injection rate means load fraction multiplied by the lowest hourly average activated carbon injection rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum oxygen level means the lowest hourly average oxygen level measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum pressure drop means the lowest hourly average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber effluent pH means the lowest hourly average sorbent liquid pH measured at the inlet to the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.

Minimum scrubber liquid flow rate means the lowest hourly average liquid flow rate (e.g., to the PM scrubber or to the acid gas scrubber) measured according to Table 7 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

Minimum scrubber pressure drop means the lowest hourly average scrubber pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum sorbent injection rate means:

(1) The load fraction multiplied by the lowest hourly average sorbent injection rate for each sorbent measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits; or

(2) For fluidized bed combustion, the lowest average ratio of sorbent to sulfur measured during the most recent performance test.

Minimum total secondary electric power means the lowest hourly average total secondary electric power determined from the values of secondary voltage and secondary current to the electrostatic precipitator measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum gas, as defined in ASTM D1835 (incorporated by reference, see §63.14); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 35 and 41 megajoules (MJ) per dry standard cubic meter (950 and 1,100 Btu per dry standard cubic foot); or

(4) Propane or propane derived synthetic natural gas. Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the boiler or process heater unit. It is not necessary for fuel to be combusted for the entire 24-hour period.

Other combustor means a unit designed to burn solid fuel that is not classified as a dutch oven, fluidized bed, fuel cell, hybrid suspension grate boiler, pulverized coal boiler, stoker, sloped grate, or suspension boiler as defined in this subpart.

Other gas 1 fuel means a gaseous fuel that is not natural gas or refinery gas and does not exceed a maximum concentration of 40 micrograms/cubic meters of mercury.

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler or process heater flue gas, boiler or process heater, firebox, or other appropriate location. This definition includes oxygen trim systems. The source owner or operator must install, calibrate, maintain, and operate the oxygen analyzer system in accordance with the manufacturer's recommendations.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device. A typical system consists of a flue gas oxygen and/or CO monitor that automatically provides a feedback signal to the combustion air controller.

Particulate matter (PM) means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an approved alternative method.

Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler or process heater is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

Pile burner means a boiler design incorporating a design where the anticipated biomass fuel has a high relative moisture content. Grates serve to support the fuel, and underfire air flowing up through the grates provides oxygen for combustion, cools the grates, promotes turbulence in the fuel bed, and fires the fuel. The most common form of pile burning is the dutch oven.

Process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. A device combusting solid waste, as defined in §241.3 of this chapter, is not a process heater unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves. Waste heat process heaters are excluded from this definition.

Pulverized coal boiler means a boiler in which pulverized coal or other solid fossil fuel is introduced into an air stream that carries the coal to the combustion chamber of the boiler where it is fired in suspension.

Qualified energy assessor means:

(1) Someone who has demonstrated capabilities to evaluate energy savings opportunities for steam generation and major energy using systems, including, but not limited to:

(i) Boiler combustion management.

(ii) Boiler thermal energy recovery, including

(A) Conventional feed water economizer,

(B) Conventional combustion air preheater, and

(C) Condensing economizer.

(iii) Boiler blowdown thermal energy recovery.

(iv) Primary energy resource selection, including

(A) Fuel (primary energy source) switching, and

(B) Applied steam energy versus direct-fired energy versus electricity.

(v) Insulation issues.

(vi) Steam trap and steam leak management.

(vi) Condensate recovery.

(viii) Steam end-use management.

(2) Capabilities and knowledge includes, but is not limited to:

(i) Background, experience, and recognized abilities to perform the assessment activities, data analysis, and report preparation.

(ii) Familiarity with operating and maintenance practices for steam or process heating systems.

(iii) Additional potential steam system improvement opportunities including improving steam turbine operations and reducing steam demand.

(iv) Additional process heating system opportunities including effective utilization of waste heat and use of proper process heating methods.

(v) Boiler-steam turbine cogeneration systems.

(vi) Industry specific steam end-use systems.

Refinery gas means any gas that is generated at a petroleum refinery and is combusted. Refinery gas includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. Refinery gas includes gases generated from other facilities when that gas is combined and combusted in any proportion with gas generated at a refinery.

Regulated gas stream means an offgas stream that is routed to a boiler or process heater for the purpose of achieving compliance with a standard under another subpart of this part or part 60, part 61, or part 65 of this chapter.

Residential boiler means a boiler used to provide heat and/or hot water and/or as part of a residential combined heat and power system. This definition includes boilers located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/industrial facility (e.g., farm) used primarily to provide heat and/or hot water for:

(1) A dwelling containing four or fewer families; or

(2) A single unit residence dwelling that has since been converted or subdivided into condominiums or apartments.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society of Testing and Materials in ASTM D396-10 (incorporated by reference, *see* §63.14(b)).

Responsible official means responsible official as defined in §70.2.

Secondary material means the material as defined in §241.2 of this chapter.

Shutdown means the cessation of operation of a boiler or process heater for any purpose. Shutdown begins either when none of the steam from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or at the point of no fuel being fired in the boiler or process heater, whichever is earlier. Shutdown ends when there is no steam and no heat being supplied and no fuel being fired in the boiler or process heater.

Sloped grate means a unit where the solid fuel is fed to the top of the grate from where it slides downwards; while sliding the fuel first dries and then ignites and burns. The ash is deposited at the bottom of the grate. Fluidized bed, dutch oven, pile burner, hybrid suspension grate, suspension burners, and fuel cells are not considered to be a sloped grate design.

Solid fossil fuel includes, but is not limited to, coal, coke, petroleum coke, and tire derived fuel.

Solid fuel means any solid fossil fuel or biomass or bio-based solid fuel.

Startup means either the first-ever firing of fuel in a boiler or process heater for the purpose of supplying steam or heat for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam or heat from the boiler or process heater is supplied for heating, and/or producing electricity, or for any other purpose.

Steam output means:

(1) For a boiler that produces steam for process or heating only (no power generation), the energy content in terms of MMBtu of the boiler steam output,

(2) For a boiler that cogenerates process steam and electricity (also known as combined heat and power), the total energy output, which is the sum of the energy content of the steam exiting the turbine and sent to process in MMBtu and the energy of the electricity generated converted to MMBtu at a rate of 10,000 Btu per kilowatt-hour generated (10 MMBtu per megawatt-hour), and

(3) For a boiler that generates only electricity, the alternate output-based emission limits would be calculated using Equations 21 through 25 of this section, as appropriate:

(i) For emission limits for boilers in the unit designed to burn solid fuel subcategory use Equation 21 of this section:

$$EL_{OBE} = EL_T \times 12.7 \text{ MMBtu/Mwh} \quad \text{(Eq. 21)}$$

Where:

EL_{OBE} = Emission limit in units of pounds per megawatt-hour.

EL_T = Appropriate emission limit from Table 1 or 2 of this subpart in units of pounds per million Btu heat input.

(ii) For PM and CO emission limits for boilers in one of the subcategories of units designed to burn coal use Equation 22 of this section:

$$EL_{OBE} = EL_T \times 12.2 \text{ MMBtu/Mwh} \quad \text{(Eq. 22)}$$

Where:

EL_{OBE} = Emission limit in units of pounds per megawatt-hour.

EL_T = Appropriate emission limit from Table 1 or 2 of this subpart in units of pounds per million Btu heat input.

(iii) For PM and CO emission limits for boilers in one of the subcategories of units designed to burn biomass use Equation 23 of this section:

$$EL_{OBE} = EL_T \times 13.9 \text{ MMBtu/Mwh} \quad \text{(Eq. 23)}$$

Where:

EL_{OBE} = Emission limit in units of pounds per megawatt-hour.

EL_T = Appropriate emission limit from Table 1 or 2 of this subpart in units of pounds per million Btu heat input.

(iv) For emission limits for boilers in one of the subcategories of units designed to burn liquid fuels use Equation 24 of this section:

$$EL_{OBE} = EL_T \times 13.8 \text{ MMBtu/Mwh} \quad \text{(Eq. 24)}$$

Where:

EL_{OBE} = Emission limit in units of pounds per megawatt-hour.

EL_T = Appropriate emission limit from Table 1 or 2 of this subpart in units of pounds per million Btu heat input.

(v) For emission limits for boilers in the unit designed to burn gas 2 (other) subcategory, use Equation 25 of this section:

$$EL_{OBE} = EL_T \times 10.4 \text{ MMBtu/Mwh} \quad \text{(Eq. 25)}$$

Where:

EL_{OBE} = Emission limit in units of pounds per megawatt-hour.

EL_T = Appropriate emission limit from Table 1 or 2 of this subpart in units of pounds per million Btu heat input.

Stoker means a unit consisting of a mechanically operated fuel feeding mechanism, a stationary or moving grate to support the burning of fuel and admit under-grate air to the fuel, an overfire air system to complete combustion, and an ash discharge system. This definition of stoker includes air swept stokers. There are two general types of stokers: Underfeed and overfeed. Overfeed stokers include mass feed and spreader stokers. Fluidized bed, dutch oven, pile burner, hybrid suspension grate, suspension burners, and fuel cells are not considered to be a stoker design.

Stoker/sloped grate/other unit designed to burn kiln dried biomass means the unit is in the units designed to burn biomass/bio-based solid subcategory that is either a stoker, sloped grate, or other combustor design and is not in the stoker/sloped grate/other units designed to burn wet biomass subcategory.

Stoker/sloped grate/other unit designed to burn wet biomass means the unit is in the units designed to burn biomass/bio-based solid subcategory that is either a stoker, sloped grate, or other combustor design and any of the biomass/bio-based solid fuel combusted in the unit exceeds 20 percent moisture on an annual heat input basis.

Suspension burner means a unit designed to fire dry biomass/biobased solid particles in suspension that are conveyed in an airstream to the furnace like pulverized coal. The combustion of the fuel material is completed on a grate or floor below. The biomass/biobased fuel combusted in the unit shall not exceed 20 percent moisture on an annual heat input basis. Fluidized bed, dutch oven, pile burner, and hybrid suspension grate units are not part of the suspension burner subcategory.

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The boiler or a replacement remains at a location within the facility and performs the same or similar function for more than 12 consecutive months, unless the regulatory agency approves an extension. An extension may be granted by the regulating agency upon petition by the owner or operator of a unit specifying the basis for such a request. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another within the facility but continues to perform the same or similar function and serve the same electricity, steam, and/or hot water system in an attempt to circumvent the residence time requirements of this definition.

Total selected metals (TSM) means the sum of the following metallic hazardous air pollutants: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Traditional fuel means the fuel as defined in §241.2 of this chapter.

Tune-up means adjustments made to a boiler or process heater in accordance with the procedures outlined in §63.7540(a)(10).

Ultra low sulfur liquid fuel means a distillate oil that has less than or equal to 15 ppm sulfur.

Unit designed to burn biomass/bio-based solid subcategory includes any boiler or process heater that burns at least 10 percent biomass or bio-based solids on an annual heat input basis in combination with solid fossil fuels, liquid fuels, or gaseous fuels.

Unit designed to burn coal/solid fossil fuel subcategory includes any boiler or process heater that burns any coal or other solid fossil fuel alone or at least 10 percent coal or other solid fossil fuel on an annual heat input basis in combination with liquid fuels, gaseous fuels, or less than 10 percent biomass and bio-based solids on an annual heat input basis.

Unit designed to burn gas 1 subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in this definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply interruptions of any duration are also included in this definition.

Unit designed to burn gas 2 (other) subcategory includes any boiler or process heater that is not in the unit designed to burn gas 1 subcategory and burns any gaseous fuels either alone or in combination with less than 10 percent coal/solid fossil fuel, and less than 10 percent biomass/bio-based solid fuel on an annual heat input basis, and no liquid fuels. Gaseous fuel boilers and process heaters that are not in the unit designed to burn gas 1 subcategory and that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in this definition. Gaseous fuel boilers and process heaters that are not in the unit designed to burn gas 1 subcategory and that burn liquid fuel during periods of gas curtailment or gas supply interruption of any duration are also included in this definition.

Unit designed to burn heavy liquid subcategory means a unit in the unit designed to burn liquid subcategory where at least 10 percent of the heat input from liquid fuels on an annual heat input basis comes from heavy liquids.

Unit designed to burn light liquid subcategory means a unit in the unit designed to burn liquid subcategory that is not part of the unit designed to burn heavy liquid subcategory.

Unit designed to burn liquid subcategory includes any boiler or process heater that burns any liquid fuel, but less than 10 percent coal/solid fossil fuel and less than 10 percent biomass/bio-based solid fuel

on an annual heat input basis, either alone or in combination with gaseous fuels. Units in the unit design to burn gas 1 or unit designed to burn gas 2 (other) subcategories that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year are not included in this definition. Units in the unit design to burn gas 1 or unit designed to burn gas 2 (other) subcategories during periods of gas curtailment or gas supply interruption of any duration are also not included in this definition.

Unit designed to burn liquid fuel that is a non-continental unit means an industrial, commercial, or institutional boiler or process heater meeting the definition of the unit designed to burn liquid subcategory located in the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Unit designed to burn solid fuel subcategory means any boiler or process heater that burns only solid fuels or at least 10 percent solid fuel on an annual heat input basis in combination with liquid fuels or gaseous fuels.

Vegetable oil means oils extracted from vegetation.

Voluntary Consensus Standards or VCS mean technical standards (*e.g.,* materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. EPA/Office of Air Quality Planning and Standards, by precedent, has only used VCS that are written in English. Examples of VCS bodies are: American Society of Testing and Materials (ASTM 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-B2959, (800) 262-1373, *http://www.astm.org*), American Society of Mechanical Engineers (ASME ASME, Three Park Avenue, New York, NY 10016-5990, (800) 843-2763, *http://www.asme.org*), International Standards Organization (ISO 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, + 41 22 749 01 11, *http://www.iso.org/iso/home.htm*), Standards Australia (AS Level 10, The Exchange Centre, 20 Bridge Street, Sydney, GPO Box 476, Sydney NSW 2001, + 61 2 9237 6171 *http://www.stadards.org.au*), British Standards Institution (BSI, 389 Chiswick High Road, London, W4 4AL, United Kingdom, + 44 (0)20 8996 9001, *http://www.bsigroup.com*), Canadian Standards Association (CSA 5060 Spectrum Way, Suite 100, Mississauga, Ontario L4W 5N6, Canada, 800-463-6727, *http://www.csa.ca*), European Committee for Standardization (CEN CENELEC Management Centre Avenue Marnix 17 B-1000 Brussels, Belgium + 32 2 550 08 11, *http://www.cen.eu/cen*), and German Engineering Standards (VDI VDI Guidelines Department, P.O. Box 10 11 39 40002, Duesseldorf, Germany, + 49 211 6214-230, *http://www.vdi.eu*). The types of standards that are not considered VCS are standards developed by: The United States, *e.g.,* California (CARB) and Texas (TCEQ); industry groups, such as American Petroleum Institute (API), Gas Processors Association (GPA), and Gas Research Institute (GRI); and other branches of the U.S. government, *e.g.,* Department of Defense (DOD) and Department of Transportation (DOT). This does not preclude EPA from using standards developed by groups that are not VCS bodies within their rule. When this occurs, EPA has done searches and reviews for VCS equivalent to these non-EPA methods.

Waste heat boiler means a device that recovers normally unused energy (i.e., hot exhaust gas) and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators. Waste heat boilers are heat exchangers generating steam from incoming hot exhaust gas from an industrial (e.g., thermal oxidizer, kiln, furnace) or power (e.g., combustion turbine, engine) equipment. Duct burners are sometimes used to increase the temperature of the incoming hot exhaust gas.

Waste heat process heater means an enclosed device that recovers normally unused energy (i.e., hot exhaust gas) and converts it to usable heat. Waste heat process heaters are also referred to as recuperative process heaters. This definition includes both fired and unfired waste heat process heaters.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter or to

absorb and neutralize acid gases, such as hydrogen chloride. A wet scrubber creates an aqueous stream or slurry as a byproduct of the emissions control process.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

[78 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013]

Table 1 to Subpart DDDDD of Part 63—Emission Limits for New or Reconstructed Boilers and Process Heaters

As stated in §63.7500, you must comply with the following applicable emission limits:

[Units with heat input capacity of 10 million Btu per hour or greater]

If your boiler or process heater is in this subcategory . . .	**For the following pollutants . . .**	**The emissions must not exceed the following emission limits, except during startup and shutdown . . .**	**Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .**	**Using this specified sampling volume or test run duration . . .**
1. Units in all subcategories designed to burn solid fuel.	a. HCl	2.2E-02 lb per MMBtu of heat input	2.5E-02 lb per MMBtu of steam output or 0.28 lb per MWh	For M26A, collect a minimum of 1 dscm per run; for M26 collect a minimum of 120 liters per run.
	b. Mercury	8.0E-07[a] lb per MMBtu of heat input	8.7E-07[a] lb per MMBtu of steam output or 1.1E-05[a] lb per MWh	For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[b] collect a minimum of 4 dscm.
2. Units designed to burn coal/solid fossil fuel	a. Filterable PM (or TSM)	1.1E-03 lb per MMBtu of heat input; or (2.3E-05 lb per MMBtu of heat input)	1.1E-03 lb per MMBtu of steam output or 1.4E-02 lb per MWh; or (2.7E-05 lb per MMBtu of steam output or 2.9E-04 lb per MWh)	Collect a minimum of 3 dscm per run.
3. Pulverized coal boilers designed to burn coal/solid fossil fuel	a. Carbon monoxide (CO) (or CEMS)	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (320 ppm by volume on a dry basis corrected to 3 percent	0.11 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average	1 hr minimum sampling time.

If your boiler or process heater is in this subcategory . . .	**For the following pollutants . . .**	**The emissions must not exceed the following emission limits, except during startup and shutdown . . .**	**Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .**	**Using this specified sampling volume or test run duration . . .**
		oxygen, 30-day rolling average)		
4. Stokers designed to burn coal/solid fossil fuel	a. CO (or CEMS)	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (340 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	0.12 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average	1 hr minimum sampling time.
5. Fluidized bed units designed to burn coal/solid fossil fuel	a. CO (or CEMS)	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (230 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	0.11 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average	1 hr minimum sampling time.
6. Fluidized bed units with an integrated heat exchanger designed to burn coal/solid fossil fuel	a. CO (or CEMS)	140 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (150 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	1.2E-01 lb per MMBtu of steam output or 1.5 lb per MWh; 3-run average	1 hr minimum sampling time.
7. Stokers/sloped grate/others designed to burn wet biomass fuel	a. CO (or CEMS)	620 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (390 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	5.8E-01 lb per MMBtu of steam output or 6.8 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	3.0E-02 lb per MMBtu of heat input; or (2.6E-05 lb per MMBtu of heat input)	3.5E-02 lb per MMBtu of steam output or 4.2E-01 lb per MWh; or (2.7E-05 lb per MMBtu of steam output or 3.7E-04 lb per MWh)	Collect a minimum of 2 dscm per run.
8. Stokers/sloped	a. CO	460 ppm by volume on a	4.2E-01 lb per	1 hr minimum

If your boiler or process heater is in this subcategory . . .	**For the following pollutants . . .**	**The emissions must not exceed the following emission limits, except during startup and shutdown . . .**	**Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .**	**Using this specified sampling volume or test run duration . . .**
grate/others designed to burn kiln-dried biomass fuel		dry basis corrected to 3 percent oxygen	MMBtu of steam output or 5.1 lb per MWh	sampling time.
	b. Filterable PM (or TSM)	3.0E-02 lb per MMBtu of heat input; or (4.0E-03 lb per MMBtu of heat input)	3.5E-02 lb per MMBtu of steam output or 4.2E-01 lb per MWh; or (4.2E-03 lb per MMBtu of steam output or 5.6E-02 lb per MWh)	Collect a minimum of 2 dscm per run.
9. Fluidized bed units designed to burn biomass/bio-based solids	a. CO (or CEMS)	230 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (310 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	2.2E-01 lb per MMBtu of steam output or 2.6 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	9.8E-03 lb per MMBtu of heat input; or (8.3E-05[a] lb per MMBtu of heat input)	1.2E-02 lb per MMBtu of steam output or 0.14 lb per MWh; or (1.1E-04[a] lb per MMBtu of steam output or 1.2E-03[a] lb per MWh)	Collect a minimum of 3 dscm per run.
10. Suspension burners designed to burn biomass/bio-based solids	a. CO (or CEMS)	2,400 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (2,000 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)	1.9 lb per MMBtu of steam output or 27 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	3.0E-02 lb per MMBtu of heat input; or (6.5E-03 lb per MMBtu of heat input)	3.1E-02 lb per MMBtu of steam output or 4.2E-01 lb per MWh; or (6.6E-03 lb per MMBtu of steam output or 9.1E-02 lb per MWh)	Collect a minimum of 2 dscm per run.
11. Dutch Ovens/Pile	a. CO (or	330 ppm by volume on a	3.5E-01 lb per	1 hr minimum

If your boiler or process heater is in this subcategory . . .	**For the following pollutants . . .**	**The emissions must not exceed the following emission limits, except during startup and shutdown . . .**	**Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .**	**Using this specified sampling volume or test run duration . . .**
burners designed to burn biomass/bio-based solids	CEMS)	dry basis corrected to 3 percent oxygen, 3-run average; or (520 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)	MMBtu of steam output or 3.6 lb per MWh; 3-run average	sampling time.
	b. Filterable PM (or TSM)	3.2E-03 lb per MMBtu of heat input; or (3.9E-05 lb per MMBtu of heat input)	4.3E-03 lb per MMBtu of steam output or 4.5E-02 lb per MWh; or (5.2E-05 lb per MMBtu of steam output or 5.5E-04 lb per MWh)	Collect a minimum of 3 dscm per run.
12. Fuel cell units designed to burn biomass/bio-based solids	a. CO	910 ppm by volume on a dry basis corrected to 3 percent oxygen	1.1 lb per MMBtu of steam output or 1.0E + 01 lb per MWh	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	2.0E-02 lb per MMBtu of heat input; or (2.9E-05[a] lb per MMBtu of heat input)	3.0E-02 lb per MMBtu of steam output or 2.8E-01 lb per MWh; or (5.1E-05 lb per MMBtu of steam output or 4.1E-04 lb per MWh)	Collect a minimum of 2 dscm per run.
13. Hybrid suspension grate boiler designed to burn biomass/bio-based solids	a. CO (or CEMS)	1,100 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (900 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	1.4 lb per MMBtu of steam output or 12 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	2.6E-02 lb per MMBtu of heat input; or (4.4E-04 lb per MMBtu of heat input)	3.3E-02 lb per MMBtu of steam output or 3.7E-01 lb per MWh; or (5.5E-04 lb per MMBtu of steam output or 6.2E-03 lb per MWh)	Collect a minimum of 3 dscm per run.
14. Units designed to burn liquid fuel	a. HCl	4.4E-04 lb per MMBtu of heat input	4.8E-04 lb per MMBtu of steam	For M26A: Collect a minimum of 2 dscm

If your boiler or process heater is in this subcategory . . .	**For the following pollutants . . .**	**The emissions must not exceed the following emission limits, except during startup and shutdown . . .**	**Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .**	**Using this specified sampling volume or test run duration . . .**
			output or 6.1E-03 lb per MWh	per run; for M26, collect a minimum of 240 liters per run.
	b. Mercury	4.8E-07[a] lb per MMBtu of heat input	5.3E-07[a] lb per MMBtu of steam output or 6.7E-06[a] lb per MWh	For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[b] collect a minimum of 4 dscm.
15. Units designed to burn heavy liquid fuel	a. CO	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average	0.13 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	1.3E-02 lb per MMBtu of heat input; or (7.5E-05 lb per MMBtu of heat input)	1.5E-02 lb per MMBtu of steam output or 1.8E-01 lb per MWh; or (8.2E-05 lb per MMBtu of steam output or 1.1E-03 lb per MWh)	Collect a minimum of 3 dscm per run.
16. Units designed to burn light liquid fuel	a. CO	130 ppm by volume on a dry basis corrected to 3 percent oxygen	0.13 lb per MMBtu of steam output or 1.4 lb per MWh	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	1.1E-03[a] lb per MMBtu of heat input; or (2.9E-05 lb per MMBtu of heat input)	1.2E-03[a] lb per MMBtu of steam output or 1.6E-02[a] lb per MWh; or (3.2E-05 lb per MMBtu of steam output or 4.0E-04 lb per MWh)	Collect a minimum of 3 dscm per run.
17. Units designed to burn liquid fuel that are non-continental units	a. CO	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average based on stack test	0.13 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	2.3E-02 lb per MMBtu of heat input; or (8.6E-04 lb per MMBtu of heat input)	2.5E-02 lb per MMBtu of steam output or 3.2E-01 lb	Collect a minimum of 4 dscm per run.

If your boiler or process heater is in this subcategory . . .	**For the following pollutants . . .**	**The emissions must not exceed the following emission limits, except during startup and shutdown . . .**	**Or the emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .**	**Using this specified sampling volume or test run duration . . .**
			per MWh; or (9.4E-04 lb per MMBtu of steam output or 1.2E-02 lb per MWh)	
18. Units designed to burn gas 2 (other) gases	a. CO	130 ppm by volume on a dry basis corrected to 3 percent oxygen	0.16 lb per MMBtu of steam output or 1.0 lb per MWh	1 hr minimum sampling time.
	b. HCl	1.7E-03 lb per MMBtu of heat input	2.9E-03 lb per MMBtu of steam output or 1.8E-02 lb per MWh	For M26A, Collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run.
	c. Mercury	7.9E-06 lb per MMBtu of heat input	1.4E-05 lb per MMBtu of steam output or 8.3E-05 lb per MWh	For M29, collect a minimum of 3 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[b] collect a minimum of 3 dscm.
	d. Filterable PM (or TSM)	6.7E-03 lb per MMBtu of heat input; or (2.1E-04 lb per MMBtu of heat input)	1.2E-02 lb per MMBtu of steam output or 7.0E-02 lb per MWh; or (3.5E-04 lb per MMBtu of steam output or 2.2E-03 lb per MWh)	Collect a minimum of 3 dscm per run.

[a]If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to §63.7515 if all of the other provisions of §63.7515 are met. For all other pollutants that do not contain a footnote “a”, your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing.

[b]Incorporated by reference, see §63.14.

[c]If your affected source is a new or reconstructed affected source that commenced construction or reconstruction after June 4, 2010, and before January 31, 2013, you may comply with the emission limits in Tables 11, 12 or 13 to this subpart until January 31, 2016. On and after January 31, 2016, you must comply with the emission limits in Table 1 to this subpart.

[78 FR 7193, Jan. 31, 2013]

Table 2 to Subpart DDDDD of Part 63—Emission Limits for Existing Boilers and Process Heaters

As stated in §63.7500, you must comply with the following applicable emission limits:

[Units with heat input capacity of 10 million Btu per hour or greater]

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during startup and shutdown . . .	The emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .	Using this specified sampling volume or test run duration . . .
1. Units in all subcategories designed to burn solid fuel	a. HCl	2.2E-02 lb per MMBtu of heat input	2.5E-02 lb per MMBtu of steam output or 0.27 lb per MWh	For M26A, Collect a minimum of 1 dscm per run; for M26, collect a minimum of 120 liters per run.
	b. Mercury	5.7E-06 lb per MMBtu of heat input	6.4E-06 lb per MMBtu of steam output or 7.3E-05 lb per MWh	For M29, collect a minimum of 3 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[b] collect a minimum of 3 dscm.
2. Units design to burn coal/solid fossil fuel	a. Filterable PM (or TSM)	4.0E-02 lb per MMBtu of heat input; or (5.3E-05 lb per MMBtu of heat input)	4.2E-02 lb per MMBtu of steam output or 4.9E-01 lb per MWh; or (5.6E-05 lb per MMBtu of steam output or 6.5E-04 lb per MWh)	Collect a minimum of 2 dscm per run.
3. Pulverized coal boilers designed to burn coal/solid fossil fuel	a. CO (or CEMS)	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (320 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	0.11 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average	1 hr minimum sampling time.
4. Stokers designed to burn coal/solid fossil fuel	a. CO (or CEMS)	160 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (340 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling	0.14 lb per MMBtu of steam output or 1.7 lb per MWh; 3-run average	1 hr minimum sampling time.

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during startup and shutdown . . .	The emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .	Using this specified sampling volume or test run duration . . .
		average)		
5. Fluidized bed units designed to burn coal/solid fossil fuel	a. CO (or CEMS)	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (230 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	0.12 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average	1 hr minimum sampling time.
6. Fluidized bed units with an integrated heat exchanger designed to burn coal/solid fossil fuel	a. CO (or CEMS)	140 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (150 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	1.3E-01 lb per MMBtu of steam output or 1.5 lb per MWh; 3-run average	1 hr minimum sampling time.
7. Stokers/sloped grate/others designed to burn wet biomass fuel	a. CO (or CEMS)	1,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (720 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	1.4 lb per MMBtu of steam output or 17 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	3.7E-02 lb per MMBtu of heat input; or (2.4E-04 lb per MMBtu of heat input)	4.3E-02 lb per MMBtu of steam output or 5.2E-01 lb per MWh; or (2.8E-04 lb per MMBtu of steam output or 3.4E-04 lb per MWh)	Collect a minimum of 2 dscm per run.
8. Stokers/sloped grate/others designed to burn kiln-dried biomass fuel	a. CO	460 ppm by volume on a dry basis corrected to 3 percent oxygen	4.2E-01 lb per MMBtu of steam output or 5.1 lb per MWh	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	3.2E-01 lb per MMBtu of heat input; or (4.0E-03 lb per MMBtu of heat input)	3.7E-01 lb per MMBtu of steam output or 4.5 lb per MWh; or (4.6E-03 lb per MMBtu of steam output or 5.6E-02 lb per MWh)	Collect a minimum of 1 dscm per run.

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during startup and shutdown . . .	The emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .	Using this specified sampling volume or test run duration . . .
9. Fluidized bed units designed to burn biomass/bio-based solid	a. CO (or CEMS)	470 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (310 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	4.6E-01 lb per MMBtu of steam output or 5.2 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	1.1E-01 lb per MMBtu of heat input; or (1.2E-03 lb per MMBtu of heat input)	1.4E-01 lb per MMBtu of steam output or 1.6 lb per MWh; or (1.5E-03 lb per MMBtu of steam output or 1.7E-02 lb per MWh)	Collect a minimum of 1 dscm per run.
10. Suspension burners designed to burn biomass/bio-based solid	a. CO (or CEMS)	2,400 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (2,000 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)	1.9 lb per MMBtu of steam output or 27 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	5.1E-02 lb per MMBtu of heat input; or (6.5E-03 lb per MMBtu of heat input)	5.2E-02 lb per MMBtu of steam output or 7.1E-01 lb per MWh; or (6.6E-03 lb per MMBtu of steam output or 9.1E-02 lb per MWh)	Collect a minimum of 2 dscm per run.
11. Dutch Ovens/Pile burners designed to burn biomass/bio-based solid	a. CO (or CEMS)	770 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (520 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)	8.4E-01 lb per MMBtu of steam output or 8.4 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	2.8E-01 lb per MMBtu of heat input; or (2.0E-03 lb per MMBtu of heat input)	3.9E-01 lb per MMBtu of steam output or 3.9 lb per MWh; or (2.8E-03 lb per MMBtu of steam	Collect a minimum of 1 dscm per run.

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during startup and shutdown . . .	The emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .	Using this specified sampling volume or test run duration . . .
			output or 2.8E-02 lb per MWh)	
12. Fuel cell units designed to burn biomass/bio-based solid	a. CO	1,100 ppm by volume on a dry basis corrected to 3 percent oxygen	2.4 lb per MMBtu of steam output or 12 lb per MWh	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	2.0E-02 lb per MMBtu of heat input; or (5.8E-03 lb per MMBtu of heat input)	5.5E-02 lb per MMBtu of steam output or 2.8E-01 lb per MWh; or (1.6E-02 lb per MMBtu of steam output or 8.1E-02 lb per MWh)	Collect a minimum of 2 dscm per run.
13. Hybrid suspension grate units designed to burn biomass/bio-based solid	a. CO (or CEMS)	2,800 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (900 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	2.8 lb per MMBtu of steam output or 31 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	4.4E-01 lb per MMBtu of heat input; or (4.5E-04 lb per MMBtu of heat input)	5.5E-01 lb per MMBtu of steam output or 6.2 lb per MWh; or (5.7E-04 lb per MMBtu of steam output or 6.3E-03 lb per MWh)	Collect a minimum of 1 dscm per run.
14. Units designed to burn liquid fuel	a. HCl	1.1E-03 lb per MMBtu of heat input	1.4E-03 lb per MMBtu of steam output or 1.6E-02 lb per MWh	For M26A, collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run.
	b. Mercury	2.0E-06 lb per MMBtu of heat input	2.5E-06 lb per MMBtu of steam output or 2.8E-05 lb per MWh	For M29, collect a minimum of 3 dscm per run; for M30A or M30B collect a minimum sample as specified in the method, for ASTM D6784[b] collect a minimum of 2 dscm.
15. Units designed to	a. CO	130 ppm by volume on a	0.13 lb per MMBtu of	1 hr minimum sampling

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during startup and shutdown . . .	The emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .	Using this specified sampling volume or test run duration . . .
burn heavy liquid fuel		dry basis corrected to 3 percent oxygen, 3-run average	steam output or 1.4 lb per MWh; 3-run average	time.
	b. Filterable PM (or TSM)	6.2E-02 lb per MMBtu of heat input; or (2.0E-04 lb per MMBtu of heat input)	7.5E-02 lb per MMBtu of steam output or 8.6E-01 lb per MWh; or (2.5E-04 lb per MMBtu of steam output or 2.8E-03 lb per MWh)	Collect a minimum of 1 dscm per run.
16. Units designed to burn light liquid fuel	a. CO	130 ppm by volume on a dry basis corrected to 3 percent oxygen	0.13 lb per MMBtu of steam output or 1.4 lb per MWh	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	7.9E-03 lb per MMBtu of heat input; or (6.2E-05 lb per MMBtu of heat input)	9.6E-03 lb per MMBtu of steam output or 1.1E-01 lb per MWh; or (7.5E-05 lb per MMBtu of steam output or 8.6E-04 lb per MWh)	Collect a minimum of 3 dscm per run.
17. Units designed to burn liquid fuel that are non-continental units	a. CO	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average based on stack test	0.13 lb per MMBtu of steam output or 1.4 lb per MWh; 3-run average	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	2.7E-01 lb per MMBtu of heat input; or (8.6E-04 lb per MMBtu of heat input)	3.3E-01 lb per MMBtu of steam output or 3.8 lb per MWh; or (1.1E-03 lb per MMBtu of steam output or 1.2E-02 lb per MWh)	Collect a minimum of 2 dscm per run.
18. Units designed to burn gas 2 (other) gases	a. CO	130 ppm by volume on a dry basis corrected to 3 percent oxygen	0.16 lb per MMBtu of steam output or 1.0 lb per MWh	1 hr minimum sampling time.
	b. HCl	1.7E-03 lb per MMBtu of heat input	2.9E-03 lb per MMBtu of steam output or 1.8E-02 lb per MWh	For M26A, collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run.
	c. Mercury	7.9E-06 lb per MMBtu of	1.4E-05 lb per	For M29, collect a

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during startup and shutdown . . .	The emissions must not exceed the following alternative output-based limits, except during startup and shutdown . . .	Using this specified sampling volume or test run duration . . .
		heat input	MMBtu of steam output or 8.3E-05 lb per MWh	minimum of 3 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[b] collect a minimum of 2 dscm.
	d. Filterable PM (or TSM)	6.7E-03 lb per MMBtu of heat input or (2.1E-04 lb per MMBtu of heat input)	1.2E-02 lb per MMBtu of steam output or 7.0E-02 lb per MWh; or (3.5E-04 lb per MMBtu of steam output or 2.2E-03 lb per MWh)	Collect a minimum of 3 dscm per run.

[a]If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to §63.7515 if all of the other provisions of §63.7515 are met. For all other pollutants that do not contain a footnote a, your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing.

[b]Incorporated by reference, see §63.14.

[78 FR 7195, Jan. 31, 2013]

Table 3 to Subpart DDDDD of Part 63—Work Practice Standards

As stated in §63.7500, you must comply with the following applicable work practice standards:

If your unit is . . .	You must meet the following . . .
1. A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid, or a limited use boiler or process heater	Conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540.
2. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of less than 10 million Btu per hour in the unit designed to burn heavy liquid or unit designed to burn solid fuel subcategories; or a	Conduct a tune-up of the boiler or process heater biennially as specified in §63.7540.

If your unit is . . .	You must meet the following . . .
new or existing boiler or process heater with heat input capacity of less than 10 million Btu per hour, but greater than 5 million Btu per hour, in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid	
3. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater	Conduct a tune-up of the boiler or process heater annually as specified in §63.7540. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions under this subpart. Units in all other subcategories will conduct this tune-up as a work practice for dioxins/furans.
4. An existing boiler or process heater located at a major source facility, not including limited use units	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in §63.7575:
	a. A visual inspection of the boiler or process heater system.
	b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
	c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
	d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
	e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.
	f. A list of cost-effective energy conservation measures that are within the facility's control.
	g. A list of the energy savings potential of the energy conservation measures identified.

If your unit is . . .	You must meet the following . . .
	h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
5. An existing or new boiler or process heater subject to emission limits in Table 1 or 2 or 11 through 13 to this subpart during startup	You must operate all CMS during startup. For startup of a boiler or process heater, you must use one or a combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, and liquefied petroleum gas.
	If you start firing coal/solid fossil fuel, biomass/bio-based solids, heavy liquid fuel, or gas 2 (other) gases, you must vent emissions to the main stack(s) and engage all of the applicable control devices except limestone injection in fluidized bed combustion (FBC) boilers, dry scrubber, fabric filter, selective non-catalytic reduction (SNCR), and selective catalytic reduction (SCR). You must start your limestone injection in FBC boilers, dry scrubber, fabric filter, SNCR, and SCR systems as expeditiously as possible. Startup ends when steam or heat is supplied for any purpose.
	You must comply with all applicable emission limits at all times except for startup or shutdown periods conforming with this work practice. You must collect monitoring data during periods of startup, as specified in §63.7535(b). You must keep records during periods of startup. You must provide reports concerning activities and periods of startup, as specified in §63.7555.
6. An existing or new boiler or process heater subject to emission limits in Tables 1 or 2 or 11 through 13 to this subpart during shutdown	You must operate all CMS during shutdown. While firing coal/solid fossil fuel, biomass/bio-based solids, heavy liquid fuel, or gas 2 (other) gases during shutdown, you must vent emissions to the main stack(s) and operate all applicable control devices, except limestone injection in FBC boilers, dry scrubber, fabric filter, SNCR, and SCR.
	You must comply with all applicable emissions limits at all times except for startup or shutdown periods conforming with this work practice. You must collect monitoring data during periods of shutdown, as specified in §63.7535(b). You must keep records during periods of shutdown. You must provide reports concerning activities and periods of shutdown, as specified in §63.7555.

[78 FR 7198, Jan. 31, 2013]

Table 4 to Subpart DDDDD of Part 63—Operating Limits for Boilers and Process Heaters

As stated in §63.7500, you must comply with the applicable operating limits:

When complying with a Table 1, 2, 11, 12, or 13 numerical emission limit using . . .	You must meet these operating limits . . .
1. Wet PM scrubber control on a boiler not using a PM CPMS	Maintain the 30-day rolling average pressure drop and the 30-day rolling average liquid flow rate at or above the lowest one-hour average pressure drop and the lowest one-hour average liquid flow rate, respectively, measured during the most recent performance test demonstrating compliance with the PM emission limitation according to §63.7530(b) and Table 7 to this subpart.
2. Wet acid gas (HCl) scrubber control on a boiler not using a HCl CEMS	Maintain the 30-day rolling average effluent pH at or above the lowest one-hour average pH and the 30-day rolling average liquid flow rate at or above the lowest one-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with the HCl emission limitation according to §63.7530(b) and Table 7 to this subpart.
3. Fabric filter control on units not using a PM CPMS	a. Maintain opacity to less than or equal to 10 percent opacity (daily block average); or
	b. Install and operate a bag leak detection system according to §63.7525 and operate the fabric filter such that the bag leak detection system alert is not activated more than 5 percent of the operating time during each 6-month period.
4. Electrostatic precipitator control on units not using a PM CPMS	a. This option is for boilers and process heaters that operate dry control systems (i.e., an ESP without a wet scrubber). Existing and new boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (daily block average); or
	b. This option is only for boilers and process heaters not subject to PM CPMS or continuous compliance with an opacity limit (i.e., COMS). Maintain the 30-day rolling average total secondary electric power input of the electrostatic precipitator at or above the operating limits established during the performance test according to §63.7530(b) and Table 7 to this subpart.
5. Dry scrubber or carbon injection control on a boiler not using a mercury CEMS	Maintain the minimum sorbent or carbon injection rate as defined in §63.7575 of this subpart.
6. Any other add-on air pollution control type on units not using a PM CPMS	This option is for boilers and process heaters that operate dry control systems. Existing and new boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (daily block average).
7. Fuel analysis	Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to §63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits.
8. Performance testing	For boilers and process heaters that demonstrate compliance with a performance test, maintain the operating load of each unit such that it does not exceed 110 percent of the highest hourly average operating load recorded

When complying with a Table 1, 2, 11, 12, or 13 numerical emission limit using . . .	You must meet these operating limits . . .
	during the most recent performance test.
9. Oxygen analyzer system	For boilers and process heaters subject to a CO emission limit that demonstrate compliance with an O_2 analyzer system as specified in §63.7525(a), maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the most recent CO performance test, as specified in Table 8. This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.7525(a).
10. SO_2 CEMS	For boilers or process heaters subject to an HCl emission limit that demonstrate compliance with an SO_2 CEMS, maintain the 30-day rolling average SO_2 emission rate at or below the highest hourly average SO_2 concentration measured during the most recent HCl performance test, as specified in Table 8.

[78 FR 7199, Jan. 31, 2013]

Table 5 to Subpart DDDDD of Part 63—Performance Testing Requirements

As stated in §63.7520, you must comply with the following requirements for performance testing for existing, new or reconstructed affected sources:

To conduct a performance test for the following pollutant. . .	You must. . .	Using. . .
1. Filterable PM	a. Select sampling ports location and the number of traverse points	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G at 40 CFR part 60, appendix A-1 or A-2 to part 60 of this chapter.
	c. Determine oxygen or carbon dioxide concentration of the stack gas	Method 3A or 3B at 40 CFR part 60, appendix A-2 to part 60 of this chapter, or ANSI/ASME PTC 19.10-1981.[a]
	d. Measure the moisture content of the stack gas	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	e. Measure the PM emission concentration	Method 5 or 17 (positive pressure fabric filters must use Method 5D) at 40 CFR part 60, appendix A-3 or A-6 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
2. TSM	a. Select sampling ports	Method 1 at 40 CFR part 60, appendix A-1 of this

To conduct a performance test for the following pollutant. . .	You must. . .	Using. . .
	location and the number of traverse points	chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G at 40 CFR part 60, appendix A-1 or A-2 of this chapter.
	c. Determine oxygen or carbon dioxide concentration of the stack gas	Method 3A or 3B at 40 CFR part 60, appendix A-1 of this chapter, or ANSI/ASME PTC 19.10-1981.[a]
	d. Measure the moisture content of the stack gas	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	e. Measure the TSM emission concentration	Method 29 at 40 CFR part 60, appendix A-8 of this chapter
	f. Convert emissions concentration to lb per MMBtu emission rates	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
3. Hydrogen chloride	a. Select sampling ports location and the number of traverse points	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G at 40 CFR part 60, appendix A-2 of this chapter.
	c. Determine oxygen or carbon dioxide concentration of the stack gas	Method 3A or 3B at 40 CFR part 60, appendix A-2 of this chapter, or ANSI/ASME PTC 19.10-1981.[a]
	d. Measure the moisture content of the stack gas	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	e. Measure the hydrogen chloride emission concentration	Method 26 or 26A (M26 or M26A) at 40 CFR part 60, appendix A-8 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
4. Mercury	a. Select sampling ports location and the number of traverse points	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G at 40 CFR part 60, appendix A-1 or A-2 of this chapter.
	c. Determine oxygen or	Method 3A or 3B at 40 CFR part 60, appendix A-1 of

To conduct a performance test for the following pollutant. . .	You must. . .	Using. . .
	carbon dioxide concentration of the stack gas	this chapter, or ANSI/ASME PTC 19.10-1981.[a]
	d. Measure the moisture content of the stack gas	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	e. Measure the mercury emission concentration	Method 29, 30A, or 30B (M29, M30A, or M30B) at 40 CFR part 60, appendix A-8 of this chapter or Method 101A at 40 CFR part 61, appendix B of this chapter, or ASTM Method D6784.[a]
	f. Convert emissions concentration to lb per MMBtu emission rates	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
5. CO	a. Select the sampling ports location and the number of traverse points	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine oxygen concentration of the stack gas	Method 3A or 3B at 40 CFR part 60, appendix A-3 of this chapter, or ASTM D6522-00 (Reapproved 2005), or ANSI/ASME PTC 19.10-1981.[a]
	c. Measure the moisture content of the stack gas	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	d. Measure the CO emission concentration	Method 10 at 40 CFR part 60, appendix A-4 of this chapter. Use a measurement span value of 2 times the concentration of the applicable emission limit.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7200, Jan. 31, 2013]

Table 6 to Subpart DDDDD of Part 63—Fuel Analysis Requirements

As stated in §63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources. However, equivalent methods (as defined in §63.7575) may be used in lieu of the prescribed methods at the discretion of the source owner or operator:

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
1. Mercury	a. Collect fuel samples	Procedure in §63.7521(c) or ASTM D5192[a], or ASTM D7430[a], or ASTM D6883[a], or ASTM D2234/D2234M[a](for coal) or EPA 1631 or EPA 1631E or ASTM D6323[a] (for solid), or EPA 821-R-01-013 (for liquid or solid), or ASTM D4177[a] (for liquid), or ASTM D4057[a] (for liquid), or equivalent.
	b. Composite fuel samples	Procedure in §63.7521(d) or equivalent.

	c. Prepare composited fuel samples	EPA SW-846-3050B[a] (for solid samples), EPA SW-846-3020A[a] (for liquid samples), ASTM D2013/D2013M[a] (for coal), ASTM D5198[a] (for biomass), or EPA 3050[a] (for solid fuel), or EPA 821-R-01-013[a] (for liquid or solid), or equivalent.
	d. Determine heat content of the fuel type	ASTM D5865[a] (for coal) or ASTM E711[a] (for biomass), or ASTM D5864[a] for liquids and other solids, or ASTM D240[a] or equivalent.
	e. Determine moisture content of the fuel type	ASTM D3173[a], ASTM E871[a], or ASTM D5864[a], or ASTM D240, or ASTM D95[a] (for liquid fuels), or ASTM D4006[a] (for liquid fuels), or ASTM D4177[a] (for liquid fuels) or ASTM D4057[a] (for liquid fuels), or equivalent.
	f. Measure mercury concentration in fuel sample	ASTM D6722[a] (for coal), EPA SW-846-7471B[a] (for solid samples), or EPA SW-846-7470A[a] (for liquid samples), or equivalent.
	g. Convert concentration into units of pounds of mercury per MMBtu of heat content	Equation 8 in §63.7530.
	h. Calculate the mercury emission rate from the boiler or process heater in units of pounds per million Btu	Equations 10 and 12 in §63.7530.
2. HCl	a. Collect fuel samples	Procedure in §63.7521(c) or ASTM D5192[a], or ASTM D7430[a], or ASTM D6883[a], or ASTM D2234/D2234M[a] (for coal) or ASTM D6323[a] (for coal or biomass), ASTM D4177[a] (for liquid fuels) or ASTM D4057[a] (for liquid fuels), or equivalent.
	b. Composite fuel samples	Procedure in §63.7521(d) or equivalent.
	c. Prepare composited fuel samples	EPA SW-846-3050B[a] (for solid samples), EPA SW-846-3020A[a] (for liquid samples), ASTM D2013/D2013M§[a] (for coal), or ASTM D5198§[a] (for biomass), or EPA 3050[a] or equivalent.
	d. Determine heat content of the fuel type	ASTM D5865[a] (for coal) or ASTM E711[a] (for biomass), ASTM D5864, ASTM D240[a] or equivalent.
	e. Determine moisture content of the fuel type	ASTM D3173[a] or ASTM E871[a], or D5864[a], or ASTM D240[a], or ASTM D95[a] (for liquid fuels), or ASTM D4006[a] (for liquid fuels), or ASTM D4177[a] (for liquid fuels) or ASTM D4057[a] (for liquid fuels) or equivalent.
	f. Measure chlorine concentration in fuel sample	EPA SW-846-9250[a], ASTM D6721[a], ASTM D4208[a] (for coal), or EPA SW-846-5050[a] or ASTM E776[a] (for solid fuel), or EPA SW-846-9056[a] or SW-846-9076[a] (for solids or liquids) or equivalent.
	g. Convert concentrations into units of pounds of HCl per MMBtu of heat content	Equation 7 in §63.7530.
	h. Calculate the HCl emission rate from the boiler or	Equations 10 and 11 in §63.7530.

	process heater in units of pounds per million Btu	
3. Mercury Fuel Specification for other gas 1 fuels	a. Measure mercury concentration in the fuel sample and convert to units of micrograms per cubic meter	Method 30B (M30B) at 40 CFR part 60, appendix A-8 of this chapter or ASTM D5954[a], ASTM D6350[a], ISO 6978-1:2003(E)[a], or ISO 6978-2:2003(E)[a], or EPA-1631[a] or equivalent.
	b. Measure mercury concentration in the exhaust gas when firing only the other gas 1 fuel is fired in the boiler or process heater	Method 29, 30A, or 30B (M29, M30A, or M30B) at 40 CFR part 60, appendix A-8 of this chapter or Method 101A or Method 102 at 40 CFR part 61, appendix B of this chapter, or ASTM Method D6784[a] or equivalent.
4. TSM for solid fuels	a. Collect fuel samples	Procedure in §63.7521(c) or ASTM D5192[a], or ASTM D7430[a], or ASTM D6883[a], or ASTM D2234/D2234M[a] (for coal) or ASTM D6323[a] (for coal or biomass), or ASTM D4177[a],(for liquid fuels)or ASTM D4057[a] (for liquid fuels),or equivalent.
	b. Composite fuel samples	Procedure in §63.7521(d) or equivalent.
	c. Prepare composited fuel samples	EPA SW-846-3050B[a] (for solid samples), EPA SW-846-3020A[a] (for liquid samples), ASTM D2013/D2013M[a] (for coal), ASTM D5198[a] or TAPPI T266[a] (for biomass), or EPA 3050[a] or equivalent.
	d. Determine heat content of the fuel type	ASTM D5865[a] (for coal) or ASTM E711[a] (for biomass), or ASTM D5864[a] for liquids and other solids, or ASTM D240[a] or equivalent.
	e. Determine moisture content of the fuel type	ASTM D3173[a] or ASTM E871[a], or D5864, or ASTM D240[a], or ASTM D95[a] (for liquid fuels), or ASTM D4006[a] (for liquid fuels), or ASTM D4177[a] (for liquid fuels) or ASTM D4057[a] (for liquid fuels), or equivalent.
	f. Measure TSM concentration in fuel sample	ASTM D3683[a], or ASTM D4606 [a], or ASTM D6357[a] or EPA 200.8[a] or EPA SW-846-6020[a], or EPA SW-846-6020A[a], or EPA SW-846-6010C[a], EPA 7060[a] or EPA 7060A[a] (for arsenic only), or EPA SW-846-7740[a] (for selenium only).
	g. Convert concentrations into units of pounds of TSM per MMBtu of heat content	Equation 9 in §63.7530.
	h. Calculate the TSM emission rate from the boiler or process heater in units of pounds per million Btu	Equations 10 and 13 in §63.7530.

[a]Incorporated by reference, see §63.14.

[78 FR 7201, Jan. 31, 2013]

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Table 7 to Subpart DDDDD of Part 63—Establishing Operating Limits

As stated in §63.7520, you must comply with the following requirements for establishing operating limits:

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
1. PM, TSM, or mercury	a. Wet scrubber operating parameters	i. Establish a site-specific minimum scrubber pressure drop and minimum flow rate operating limit according to §63.7530(b)	(1) Data from the scrubber pressure drop and liquid flow rate monitors and the PM or mercury performance test	(a) You must collect scrubber pressure drop and liquid flow rate data every 15 minutes during the entire period of the performance tests.
				(b) Determine the lowest hourly average scrubber pressure drop and liquid flow rate by computing the hourly averages using all of the 15-minute readings taken during each performance test.
	b. Electrostatic precipitator operating parameters (option only for units that operate wet scrubbers)	i. Establish a site-specific minimum total secondary electric power input according to §63.7530(b)	(1) Data from the voltage and secondary amperage monitors during the PM or mercury performance test	(a) You must collect secondary voltage and secondary amperage for each ESP cell and calculate total secondary electric power input data every 15 minutes during the entire period of the performance tests.
				(b) Determine the average total secondary electric power input by computing the hourly averages using all of the 15-minute readings taken during each performance test.
2. HCl	a. Wet scrubber operating parameters	i. Establish site-specific minimum pressure drop, effluent pH, and flow rate operating limits according to §63.7530(b)	(1) Data from the pressure drop, pH, and liquid flow-rate monitors and the HCl performance test	(a) You must collect pH and liquid flow-rate data every 15 minutes during the entire period of the performance tests.
				(b) Determine the hourly average pH and liquid flow rate by computing the hourly averages using all of the 15-

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
				minute readings taken during each performance test.
	b. Dry scrubber operating parameters	i. Establish a site-specific minimum sorbent injection rate operating limit according to §63.7530(b). If different acid gas sorbents are used during the HCl performance test, the average value for each sorbent becomes the site-specific operating limit for that sorbent	(1) Data from the sorbent injection rate monitors and HCl or mercury performance test	(a) You must collect sorbent injection rate data every 15 minutes during the entire period of the performance tests.
				(b) Determine the hourly average sorbent injection rate by computing the hourly averages using all of the 15-minute readings taken during each performance test.
				(c) Determine the lowest hourly average of the three test run averages established during the performance test as your operating limit. When your unit operates at lower loads, multiply your sorbent injection rate by the load fraction (e.g., for 50 percent load, multiply the injection rate operating limit by 0.5) to determine the required injection rate.
	c. Alternative Maximum SO_2 emission rate	i. Establish a site-specific maximum SO_2 emission rate operating limit according to §63.7530(b)	(1) Data from SO_2 CEMS and the HCl performance test	(a) You must collect the SO_2 emissions data according to §63.7525(m) during the most recent HCl performance tests.
				(b) The maximum SO_2 emission rate is equal to the lowest hourly average SO_2 emission rate measured during the most recent HCl performance tests.
3. Mercury	a. Activated carbon injection	i. Establish a site-specific minimum	(1) Data from the activated carbon	(a) You must collect activated carbon injection rate data

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
		activated carbon injection rate operating limit according to §63.7530(b)	rate monitors and mercury performance test	every 15 minutes during the entire period of the performance tests.
				(b) Determine the hourly average activated carbon injection rate by computing the hourly averages using all of the 15-minute readings taken during each performance test.
				(c) Determine the lowest hourly average established during the performance test as your operating limit. When your unit operates at lower loads, multiply your activated carbon injection rate by the load fraction (e.g., actual heat input divided by heat input during performance test, for 50 percent load, multiply the injection rate operating limit by 0.5) to determine the required injection rate.
4. Carbon monoxide	a. Oxygen	i. Establish a unit-specific limit for minimum oxygen level according to §63.7520	(1) Data from the oxygen analyzer system specified in §63.7525(a)	(a) You must collect oxygen data every 15 minutes during the entire period of the performance tests.
				(b) Determine the hourly average oxygen concentration by computing the hourly averages using all of the 15-minute readings taken during each performance test.
				(c) Determine the lowest hourly average established during the performance test as your minimum operating limit.
5. Any pollutant for which compliance is demonstrated by a performance	a. Boiler or process heater operating load	i. Establish a unit specific limit for maximum operating load according to §63.7520(c)	(1) Data from the operating load monitors or from steam generation monitors	(a) You must collect operating load or steam generation data every 15 minutes during the entire period of the performance test.

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
test				
				(b) Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test.
				(c) Determine the average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as your operating limit.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7203, Jan. 31, 2013]

Table 8 to Subpart DDDDD of Part 63—Demonstrating Continuous Compliance

As stated in §63.7540, you must show continuous compliance with the emission limitations for each boiler or process heater according to the following:

If you must meet the following operating limits or work practice standards . . .	You must demonstrate continuous compliance by . . .
1. Opacity	a. Collecting the opacity monitoring system data according to §63.7525(c) and §63.7535; and
	b. Reducing the opacity monitoring data to 6-minute averages; and
	c. Maintaining opacity to less than or equal to 10 percent (daily block average).
2. PM CPMS	a. Collecting the PM CPMS output data according to §63.7525;
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average PM CPMS output data to less than the operating limit established during the performance test according to §63.7530(b)(4).
3. Fabric Filter Bag Leak Detection Operation	Installing and operating a bag leak detection system according to §63.7525 and operating the fabric filter such that the requirements in §63.7540(a)(9) are met.
4. Wet Scrubber Pressure Drop and Liquid Flow-rate	a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§63.7525 and 63.7535; and
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average pressure drop and liquid flow-rate

	at or above the operating limits established during the performance test according to §63.7530(b).
5. Wet Scrubber pH	a. Collecting the pH monitoring system data according to §§63.7525 and 63.7535; and
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average pH at or above the operating limit established during the performance test according to §63.7530(b).
6. Dry Scrubber Sorbent or Carbon Injection Rate	a. Collecting the sorbent or carbon injection rate monitoring system data for the dry scrubber according to §§63.7525 and 63.7535; and
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average sorbent or carbon injection rate at or above the minimum sorbent or carbon injection rate as defined in §63.7575.
7. Electrostatic Precipitator Total Secondary Electric Power Input	a. Collecting the total secondary electric power input monitoring system data for the electrostatic precipitator according to §§63.7525 and 63.7535; and
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average total secondary electric power input at or above the operating limits established during the performance test according to §63.7530(b).
8. Emission limits using fuel analysis	a. Conduct monthly fuel analysis for HCl or mercury or TSM according to Table 6 to this subpart; and
	b. Reduce the data to 12-month rolling averages; and
	c. Maintain the 12-month rolling average at or below the applicable emission limit for HCl or mercury or TSM in Tables 1 and 2 or 11 through 13 to this subpart.
9. Oxygen content	a. Continuously monitor the oxygen content using an oxygen analyzer system according to §63.7525(a). This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.7525(a)(2).
	b. Reducing the data to 30-day rolling averages; and
	c. Maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen level measured during the most recent CO performance test.
10. Boiler or process heater operating load	a. Collecting operating load data or steam generation data every 15 minutes.
	b. Maintaining the operating load such that it does not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test according to §63.7520(c).
11. SO_2 emissions using SO_2 CEMS	a. Collecting the SO_2 CEMS output data according to §63.7525;
	b. Reducing the data to 30-day rolling averages; and

	c. Maintaining the 30-day rolling average SO_2 CEMS emission rate to a level at or below the minimum hourly SO_2 rate measured during the most recent HCl performance test according to §63.7530.

[78 FR 7204, Jan. 31, 2013]

Table 9 to Subpart DDDDD of Part 63—Reporting Requirements

As stated in §63.7550, you must comply with the following requirements for reports:

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. Information required in §63.7550(c)(1) through (5); and	Semiannually, annually, biennially, or every 5 years according to the requirements in §63.7550(b).
	b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 3 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and	
	c. If you have a deviation from any emission limitation (emission limit and operating limit) where you are not using a CMS to comply with that emission limit or operating limit, or a deviation from a work practice standard during the reporting period, the report must contain the information in §63.7550(d); and	
	d. If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in §63.8(c)(7), or otherwise not operating, the report must contain the information in §63.7550(e)	

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7205, Jan. 31, 2013]

Table 10 to Subpart DDDDD of Part 63—Applicability of General Provisions to Subpart DDDDD

As stated in §63.7565, you must comply with the applicable General Provisions according to the following:

Citation	Subject	Applies to subpart DDDDD
§63.1	Applicability	Yes.
§63.2	Definitions	Yes. Additional terms defined in §63.7575
§63.3	Units and Abbreviations	Yes.
§63.4	Prohibited Activities and Circumvention	Yes.
§63.5	Preconstruction Review and Notification Requirements	Yes.
§63.6(a), (b)(1)-(b)(5), (b)(7), (c)	Compliance with Standards and Maintenance Requirements	Yes.
§63.6(e)(1)(i)	General duty to minimize emissions.	No. See §63.7500(a)(3) for the general duty requirement.
§63.6(e)(1)(ii)	Requirement to correct malfunctions as soon as practicable.	No.
§63.6(e)(3)	Startup, shutdown, and malfunction plan requirements.	No.
§63.6(f)(1)	Startup, shutdown, and malfunction exemptions for compliance with non-opacity emission standards.	No.
§63.6(f)(2) and (3)	Compliance with non-opacity emission standards.	Yes.
§63.6(g)	Use of alternative standards	Yes.
§63.6(h)(1)	Startup, shutdown, and malfunction exemptions to opacity standards.	No. See §63.7500(a).
§63.6(h)(2) to (h)(9)	Determining compliance with opacity emission standards	Yes.
§63.6(i)	Extension of compliance	Yes. Note: Facilities may also request extensions of compliance for the installation of combined heat and power,

		waste heat recovery, or gas pipeline or fuel feeding infrastructure as a means of complying with this subpart.
§63.6(j)	Presidential exemption.	Yes.
§63.7(a), (b), (c), and (d)	Performance Testing Requirements	Yes.
§63.7(e)(1)	Conditions for conducting performance tests	No. Subpart DDDDD specifies conditions for conducting performance tests at §63.7520(a) to (c).
§63.7(e)(2)-(e)(9), (f), (g), and (h)	Performance Testing Requirements	Yes.
§63.8(a) and (b)	Applicability and Conduct of Monitoring	Yes.
§63.8(c)(1)	Operation and maintenance of CMS	Yes.
§63.8(c)(1)(i)	General duty to minimize emissions and CMS operation	No. See §63.7500(a)(3).
§63.8(c)(1)(ii)	Operation and maintenance of CMS	Yes.
§63.8(c)(1)(iii)	Startup, shutdown, and malfunction plans for CMS	No.
§63.8(c)(2) to (c)(9)	Operation and maintenance of CMS	Yes.
§63.8(d)(1) and (2)	Monitoring Requirements, Quality Control Program	Yes.
§63.8(d)(3)	Written procedures for CMS	Yes, except for the last sentence, which refers to a startup, shutdown, and malfunction plan. Startup, shutdown, and malfunction plans are not required.
§63.8(e)	Performance evaluation of a CMS	Yes.
§63.8(f)	Use of an alternative monitoring method.	Yes.
§63.8(g)	Reduction of monitoring data	Yes.
§63.9	Notification Requirements	Yes.
§63.10(a), (b)(1)	Recordkeeping and Reporting Requirements	Yes.
§63.10(b)(2)(i)	Recordkeeping of occurrence and duration of startups or shutdowns	Yes.
§63.10(b)(2)(ii)	Recordkeeping of	No. See §63.7555(d)(7) for recordkeeping

	malfunctions	of occurrence and duration and §63.7555(d)(8) for actions taken during malfunctions.
§63.10(b)(2)(iii)	Maintenance records	Yes.
§63.10(b)(2)(iv) and (v)	Actions taken to minimize emissions during startup, shutdown, or malfunction	No.
§63.10(b)(2)(vi)	Recordkeeping for CMS malfunctions	Yes.
§63.10(b)(2)(vii) to (xiv)	Other CMS requirements	Yes.
§63.10(b)(3)	Recordkeeping requirements for applicability determinations	No.
§63.10(c)(1) to (9)	Recordkeeping for sources with CMS	Yes.
§63.10(c)(10) and (11)	Recording nature and cause of malfunctions, and corrective actions	No. See §63.7555(d)(7) for recordkeeping of occurrence and duration and §63.7555(d)(8) for actions taken during malfunctions.
§63.10(c)(12) and (13)	Recordkeeping for sources with CMS	Yes.
§63.10(c)(15)	Use of startup, shutdown, and malfunction plan	No.
§63.10(d)(1) and (2)	General reporting requirements	Yes.
§63.10(d)(3)	Reporting opacity or visible emission observation results	No.
§63.10(d)(4)	Progress reports under an extension of compliance	Yes.
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No. See §63.7550(c)(11) for malfunction reporting requirements.
§63.10(e)	Additional reporting requirements for sources with CMS	Yes.
§63.10(f)	Waiver of recordkeeping or reporting requirements	Yes.
§63.11	Control Device Requirements	No.
§63.12	State Authority and Delegation	Yes.
§63.13-63.16	Addresses, Incorporation	Yes.

	by Reference, Availability of Information, Performance Track Provisions	
§63.1(a)(5),(a)(7)-(a)(9), (b)(2), (c)(3)-(4), (d), 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv), 63.8(a)(3), 63.9(b)(3), (h)(4), 63.10(c)(2)-(4), (c)(9).	Reserved	No.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7205, Jan. 31, 2013]

Table 11 to Subpart DDDDD of Part 63—Toxic Equivalency Factors for Dioxins/Furans

Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	1
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.0003
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.3
1,2,3,7,8-pentachlorinated dibenzofuran	0.03
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.0003

[76 FR 15664, Mar. 21, 2011]

EDITORIAL NOTE: At 78 FR 7206, Jan. 31, 2013, Table 11 was added, effective Apr. 1, 2013. However Table 11 could not be added as a Table 11 is already in existence.

Table 12 to Subpart DDDDD of Part 63—Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After June 4, 2010, and Before May 20, 2011

If your boiler or process heater is in this subcategory	For the following pollutants	The emissions must not exceed the following emission limits, except during periods of startup and shutdown	Using this specified sampling volume or test run duration
1. Units in all subcategories designed to burn solid fuel	a. Mercury	3.5E-06 lb per MMBtu of heat input	For M29, collect a minimum of 2 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[a] collect a minimum of 2 dscm.
2. Units in all subcategories designed to burn solid fuel that combust at least 10 percent biomass/bio-based solids on an annual heat input basis and less than 10 percent coal/solid fossil fuels on an annual heat input basis	a. Particulate Matter	0.008 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr)	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride	0.004 lb per MMBtu of heat input	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
3. Units in all subcategories designed to burn solid fuel that combust at least 10 percent coal/solid fossil fuels on an annual heat input basis and less than 10 percent biomass/bio-based solids on an annual heat input basis	a. Particulate Matter	0.0011 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr)	Collect a minimum of 3 dscm per run.
	b. Hydrogen Chloride	0.0022 lb per MMBtu of heat input	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
4. Units designed to burn pulverized coal/solid fossil fuel	a. CO	90 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. Dioxins/Furans	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.
5. Stokers designed to burn coal/solid fossil fuel	a. CO	7 ppm by volume on a dry basis corrected to 3	1 hr minimum sampling time.

If your boiler or process heater is in this subcategory	For the following pollutants	The emissions must not exceed the following emission limits, except during periods of startup and shutdown	Using this specified sampling volume or test run duration
		percent oxygen	
	b. Dioxins/Furans	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.
6. Fluidized bed units designed to burn coal/solid fossil fuel	a. CO	30 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. Dioxins/Furans	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.
7. Stokers designed to burn biomass/bio-based solids	a. CO	560 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. Dioxins/Furans	0.005 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.
8. Fluidized bed units designed to burn biomass/bio-based solids	a. CO	260 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. Dioxins/Furans	0.02 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.
9. Suspension burners/Dutch Ovens designed to burn biomass/bio-based solids	a. CO	1,010 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. Dioxins/Furans	0.2 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.
10. Fuel cells designed to burn biomass/bio-based solids	a. CO	470 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. Dioxins/Furans	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.
11. Hybrid suspension/grate units designed to burn biomass/bio-based solids	a. CO	1,500 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. Dioxins/Furans	0.2 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.

If your boiler or process heater is in this subcategory	For the following pollutants	The emissions must not exceed the following emission limits, except during periods of startup and shutdown	Using this specified sampling volume or test run duration
12. Units designed to burn liquid fuel	a. Particulate Matter	0.002 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr)	Collect a minimum of 2 dscm per run.
	b. Hydrogen Chloride	0.0032 lb per MMBtu of heat input	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury	3.0E-07 lb per MMBtu of heat input	For M29, collect a minimum of 2 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[a] collect a minimum of 2 dscm.
	d. CO	3 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	e. Dioxins/Furans	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.
13. Units designed to burn liquid fuel located in non-continental States and territories	a. Particulate Matter	0.002 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr)	Collect a minimum of 2 dscm per run.
	b. Hydrogen Chloride	0.0032 lb per MMBtu of heat input	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury	7.8E-07 lb per MMBtu of heat input	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM

If your boiler or process heater is in this subcategory	For the following pollutants	The emissions must not exceed the following emission limits, except during periods of startup and shutdown	Using this specified sampling volume or test run duration
			D6784[a] collect a minimum of 2 dscm.
	d. CO	51 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	e. Dioxins/Furans	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.
14. Units designed to burn gas 2 (other) gases	a. Particulate Matter	0.0067 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr)	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride	0.0017 lb per MMBtu of heat input	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury	7.9E-06 lb per MMBtu of heat input	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[a] collect a minimum of 2 dscm.
	d. CO	3 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	e. Dioxins/Furans	0.08 ng/dscm (TEQ) corrected to 7 percent oxygen	Collect a minimum of 4 dscm per run.

[a]Incorporated by reference, see §63.14.

[76 FR 15664, Mar. 21, 2011]

EDITORIAL NOTE: At 78 FR 7208, Jan. 31, 2013, Table 12 was added, effective Apr. 1, 2013. However, Table 12 could not be added as a Table 12 is already in existence.

Table 13 to Subpart DDDDD of Part 63—Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After December 23, 2011, and Before January 31, 2013

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . .	Using this specified sampling volume or test run duration . . .
1. Units in all subcategories designed to burn solid fuel	a. HCl	0.022 lb per MMBtu of heat input	For M26A, collect a minimum of 1 dscm per run; for M26 collect a minimum of 120 liters per run.
	b. Mercury	8.6E-07[a] lb per MMBtu of heat input	For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[b] collect a minimum of 4 dscm.
2. Pulverized coal boilers designed to burn coal/solid fossil fuel	a. Carbon monoxide (CO) (or CEMS)	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (320 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	1.1E-03 lb per MMBtu of heat input; or (2.8E-05 lb per MMBtu of heat input)	Collect a minimum of 3 dscm per run.
3. Stokers designed to burn coal/solid fossil fuel	a. CO (or CEMS)	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (340 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	2.8E-02 lb per MMBtu of heat input; or (2.3E-05 lb per MMBtu of heat input)	Collect a minimum of 2 dscm per run.
4. Fluidized bed units designed to burn coal/solid fossil fuel	a. CO (or CEMS)	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (230 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	1.1E-03 lb per MMBtu of heat input; or (2.3E-05 lb per MMBtu of heat input)	Collect a minimum of 3 dscm per run.
5. Fluidized bed units	a. CO (or	140 ppm by volume on a dry basis	1 hr minimum sampling time.

with an integrated heat exchanger designed to burn coal/solid fossil fuel	CEMS)	corrected to 3 percent oxygen, 3-run average; or (150 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	
	b. Filterable PM (or TSM)	1.1E-03 lb per MMBtu of heat input; or (2.3E-05 lb per MMBtu of heat input)	Collect a minimum of 3 dscm per run.
6. Stokers/sloped grate/others designed to burn wet biomass fuel	a. CO (or CEMS)	620 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (410 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	3.0E-02 lb per MMBtu of heat input; or (2.6E-05 lb per MMBtu of heat input)	Collect a minimum of 2 dscm per run.
7. Stokers/sloped grate/others designed to burn kiln-dried biomass fuel	a. CO	460 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	3.2E-01 lb per MMBtu of heat input; or (4.0E-03 lb per MMBtu of heat input)	Collect a minimum of 2 dscm per run.
8. Fluidized bed units designed to burn biomass/bio-based solids	a. CO (or CEMS)	230 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (310 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	9.8E-03 lb per MMBtu of heat input; or (8.3E-05[a] lb per MMBtu of heat input)	Collect a minimum of 3 dscm per run.
9. Suspension burners designed to burn biomass/bio-based solids	a. CO (or CEMS)	2,400 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (2,000 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	5.1E-02 lb per MMBtu of heat input; or (6.5E-03 lb per MMBtu of heat input)	Collect a minimum of 2 dscm per run.
10. Dutch Ovens/Pile burners designed to burn biomass/bio-based solids	a. CO (or CEMS)	810 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (520 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)	1 hr minimum sampling time.

	b. Filterable PM (or TSM)	3.6E-02 lb per MMBtu of heat input; or (3.9E-05 lb per MMBtu of heat input)	Collect a minimum of 2 dscm per run.
11. Fuel cell units designed to burn biomass/bio-based solids	a. CO	910 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	2.0E-02 lb per MMBtu of heat input; or (2.9E-05 lb per MMBtu of heat input)	Collect a minimum of 2 dscm per run.
12. Hybrid suspension grate boiler designed to burn biomass/bio-based solids	a. CO (or CEMS)	1,500 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (900 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average)	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	2.6E-02 lb per MMBtu of heat input; or (4.4E-04 lb per MMBtu of heat input)	Collect a minimum of 3 dscm per run.
13. Units designed to burn liquid fuel	a. HCl	1.2E-03 lb per MMBtu of heat input	For M26A: Collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run.
	b. Mercury	4.9E-07[a] lb per MMBtu of heat input	For M29, collect a minimum of 4 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[b] collect a minimum of 4 dscm.
14. Units designed to burn heavy liquid fuel	a. CO (or CEMS)	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average; or (18 ppm by volume on a dry basis corrected to 3 percent oxygen, 10-day rolling average)	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	1.3E-03 lb per MMBtu of heat input; or (7.5E-05 lb per MMBtu of heat input)	Collect a minimum of 3 dscm per run.
15. Units designed to burn light liquid fuel	a. CO (or CEMS)	130[a] ppm by volume on a dry basis corrected to 3 percent oxygen; or (60 ppm by volume on a dry basis corrected to 3 percent oxygen, 1-day block average).	1 hr minimum sampling time.
	b. Filterable PM (or TSM)	1.1E-03[a] lb per MMBtu of heat input; or (2.9E-05 lb per MMBtu of heat input)	Collect a minimum of 3 dscm per run.
16. Units designed to burn liquid fuel that are	a. CO	130 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-	1 hr minimum sampling time.

non-continental units		run average based on stack test; or (91 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-hour rolling average)	
	b. Filterable PM (or TSM)	2.3E-02 lb per MMBtu of heat input; or (8.6E-04 lb per MMBtu of heat input)	Collect a minimum of 2 dscm per run.
17. Units designed to burn gas 2 (other) gases	a. CO	130 ppm by volume on a dry basis corrected to 3 percent oxygen	1 hr minimum sampling time.
	b. HCl	1.7E-03 lb per MMBtu of heat input	For M26A, Collect a minimum of 2 dscm per run; for M26, collect a minimum of 240 liters per run.
	c. Mercury	7.9E-06 lb per MMBtu of heat input	For M29, collect a minimum of 3 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784[b] collect a minimum of 3 dscm.
	d. Filterable PM (or TSM)	6.7E-03 lb per MMBtu of heat input; or (2.1E-04 lb per MMBtu of heat input)	Collect a minimum of 3 dscm per run.

[a]If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit and you are not required to conduct testing for CEMS or CPMS monitor certification, you can skip testing according to §63.7515 if all of the other provision of §63.7515 are met. For all other pollutants that do not contain a footnote “a”, your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing.

[b]Incorporated by reference, see §63.14.

[78 FR 7210, Jan. 31, 2013]

Title 40: Protection of Environment
PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

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SOURCE: 73 FR 3591, Jan. 18, 2008, unless otherwise noted.

WHAT THIS SUBPART COVERS

§60.4230 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008.

(2) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:

(i) On or after July 1, 2008; or

(ii) On or after January 1, 2009, for emergency engines.

(3) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) On or after January 1, 2009, for emergency engines.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) on or after January 1, 2008, for lean burn engines with a maximum engine *power* greater than or equal to 500 HP and less than 1,350 HP;

(iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

(5) Owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006.

(6) The provisions of §60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

(b) The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(d) For the purposes of this subpart, stationary SI ICE using alcohol-based fuels are considered gasoline engines.

(e) Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(f) Owners and operators of facilities with internal combustion engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37972, June 28, 2011]

EMISSION STANDARDS FOR MANUFACTURERS

§60.4231 What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing such engines?

(a) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008 to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as follows:

If engine displacement is * * *	**and manufacturing dates are * * ***	**the engine must meet emission standards and related requirements for nonhandheld engines under * * ***
(1) below 225 cc	July 1, 2008 to December 31, 2011	40 CFR part 90.
(2) below 225 cc	January 1, 2012 or later	40 CFR part 1054.
(3) at or above 225 cc	July 1, 2008 to December 31, 2010	40 CFR part 90.
(4) at or above 225 cc	January 1, 2011 or later	40 CFR part 1054.

(b) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that use gasoline and that are manufactured on or after the applicable date in §60.4230(a)(2), or manufactured on or after the applicable date in §60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE with a maximum engine power greater than 25 HP and less than 130 HP that use gasoline and that are manufactured on or after the applicable date in §60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cubic centimeters (cc) that use gasoline to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

(c) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that are rich burn engines that use LPG and that are manufactured on or after the applicable date in §60.4230(a)(2), or manufactured on or after the applicable date in §60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP that are rich burn engines that use LPG and that are manufactured on or after the applicable date in §60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc that are rich burn engines that use LPG to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

(d) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) under the voluntary manufacturer certification program described in this subpart must certify those engines to the certification emission standards for new

nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers who choose to certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP (except gasoline and rich burn engines that use LPG), must certify those engines to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc (except gasoline and rich burn engines that use LPG) to the certification emission standards for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate. For stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) manufactured prior to January 1, 2011, manufacturers may choose to certify these engines to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP.

(e) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) under the voluntary manufacturer certification program described in this subpart must certify those engines to the emission standards in Table 1 to this subpart. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) that are lean burn engines that use LPG to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. For stationary SI ICE with a maximum engine power greater than or equal to 100 HP (75 KW) and less than 500 HP (373 KW) manufactured prior to January 1, 2011, and for stationary SI ICE with a maximum engine power greater than or equal to 500 HP (373 KW) manufactured prior to July 1, 2010, manufacturers may choose to certify these engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048 applicable to engines that are not severe duty engines.

(f) Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, to the extent they apply to equipment manufacturers.

(g) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary SI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed stationary SI ICE.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59175, Oct. 8, 2008; 76 FR 37973, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

§60.4232 How long must my engines meet the emission standards if I am a manufacturer of stationary SI internal combustion engines?

Engines manufactured by stationary SI internal combustion engine manufacturers must meet the emission standards as required in §60.4231 during the certified emissions life of the engines.

EMISSION STANDARDS FOR OWNERS AND OPERATORS

§60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

(a) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008, must comply with the emission standards in §60.4231(a) for their stationary SI ICE.

(b) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that use gasoline must comply with the emission standards in §60.4231(b) for their stationary SI ICE.

(c) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that are rich burn engines that use LPG must comply with the emission standards in §60.4231(c) for their stationary SI ICE.

(d) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards.

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

(f) Owners and operators of any modified or reconstructed stationary SI ICE subject to this subpart must meet the requirements as specified in paragraphs (f)(1) through (5) of this section.

(1) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with emission standards in §60.4231(a) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in §60.4231(a) applicable to engines manufactured on July 1, 2008.

(2) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline engines and are modified or reconstructed after June 12, 2006, must comply with the emission standards in §60.4231(b) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in §60.4231(b) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(3) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in §60.4231(c). Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in §60.4231(c) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(4) Owners and operators of stationary SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (d) or (e) of this section, except that such owners and operators of non-emergency engines and emergency engines greater than or equal

to 130 HP must meet a nitrogen oxides (NO_x) emission standard of 3.0 grams per HP-hour (g/HP-hr), a CO emission standard of 4.0 g/HP-hr (5.0 g/HP-hr for non-emergency engines less than 100 HP), and a volatile organic compounds (VOC) emission standard of 1.0 g/HP-hr, or a NO_x emission standard of 250 ppmvd at 15 percent oxygen (O_2), a CO emission standard 540 ppmvd at 15 percent O_2 (675 ppmvd at 15 percent O_2 for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O_2, where the date of manufacture of the engine is:

(i) Prior to July 1, 2007, for non-emergency engines with a maximum engine power greater than or equal to 500 HP (except lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) Prior to July 1, 2008, for non-emergency engines with a maximum engine power less than 500 HP;

(iii) Prior to January 1, 2009, for emergency engines;

(iv) Prior to January 1, 2008, for non-emergency lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP.

(5) Owners and operators of stationary SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (e) of this section for stationary landfill/digester gas engines. Engines with maximum engine power less than 500 HP and a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power less than 500 HP manufactured on July 1, 2008. Engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) and a date of manufacture prior to July 1, 2007 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) manufactured on July 1, 2007. Lean burn engines greater than or equal to 500 HP and less than 1,350 HP with a date of manufacture prior to January 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE that are lean burn engines greater than or equal to 500 HP and less than 1,350 HP and manufactured on January 1, 2008.

(g) Owners and operators of stationary SI wellhead gas ICE engines may petition the Administrator for approval on a case-by-case basis to meet emission standards no less stringent than the emission standards that apply to stationary emergency SI engines greater than 25 HP and less than 130 HP due to the presence of high sulfur levels in the fuel, as specified in Table 1 to this subpart. The request must, at a minimum, demonstrate that the fuel has high sulfur levels that prevent the use of aftertreatment controls and also that the owner has reasonably made all attempts possible to obtain an engine that will meet the standards without the use of aftertreatment controls. The petition must request the most stringent standards reasonably applicable to the engine using the fuel.

(h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37973, June 28, 2011]

§60.4234 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

OTHER REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4235 What fuel requirements must I meet if I am an owner or operator of a stationary SI gasoline fired internal combustion engine subject to this subpart?

Owners and operators of stationary SI ICE subject to this subpart that use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR 80.195.

§60.4236 What is the deadline for importing or installing stationary SI ICE produced in previous model years?

(a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233.

(b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010.

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011.

(d) In addition to the requirements specified in §§60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section.

(e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

§60.4237 What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

(a) Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(b) Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

COMPLIANCE REQUIREMENTS FOR MANUFACTURERS

§60.4238 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≤19 KW (25 HP) or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in §60.4231(a) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§60.4239 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that use gasoline or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in §60.4231(b) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§60.4240 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that are rich burn engines that use LPG or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in §60.4231(c) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions

of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§60.4241 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines participating in the voluntary certification program or a manufacturer of equipment containing such engines?

(a) Manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to certify their engines to the emission standards in §60.4231(d) or (e), as applicable, under the voluntary certification program described in this subpart. Manufacturers who certify their engines under the voluntary certification program must meet the requirements as specified in paragraphs (b) through (g) of this section. In addition, manufacturers of stationary SI internal combustion engines who choose to certify their engines under the voluntary certification program, must also meet the requirements as specified in §60.4247.

(b) Manufacturers of engines other than those certified to standards in 40 CFR part 90 or 40 CFR part 1054 must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must follow the same test procedures that apply to large SI nonroad engines under 40 CFR part 1048, but must use the D-1 cycle of International Organization of Standardization 8178-4: 1996(E) (incorporated by reference, see 40 CFR 60.17) or the test cycle requirements specified in Table 3 to 40 CFR 1048.505, except that Table 3 of 40 CFR 1048.505 applies to high load engines only. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

(c) Certification of stationary SI ICE to the emission standards specified in §60.4231(d) or (e), as applicable, is voluntary, but manufacturers who decide to certify are subject to all of the requirements indicated in this subpart with regard to the engines included in their certification. Manufacturers must clearly label their stationary SI engines as certified or non-certified engines.

(d) Manufacturers of natural gas fired stationary SI ICE who conduct voluntary certification of stationary SI ICE to the emission standards specified in §60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the definition of pipeline-quality natural gas. The fuel used for certifying stationary SI natural gas engines must meet the definition of pipeline-quality natural gas as described in §60.4248. In addition, the manufacturer must provide information to the owner and operator of the certified stationary SI engine including the specifications of the pipeline-quality natural gas to which the engine is certified and what adjustments the owner or operator must make to the engine when installed in the field to ensure compliance with the emission standards.

(e) Manufacturers of stationary SI ICE that are lean burn engines fueled by LPG who conduct voluntary certification of stationary SI ICE to the emission standards specified in §60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the specifications in 40 CFR 1065.720.

(f) Manufacturers may certify their engines for operation using gaseous fuels in addition to pipeline-quality natural gas; however, the manufacturer must specify the properties of that fuel and provide testing information showing that the engine will meet the emission standards specified in §60.4231(d) or (e), as applicable, when operating on that fuel. The manufacturer must also provide instructions for configuring the stationary engine to meet the emission standards on fuels that do not meet the pipeline-quality natural gas definition. The manufacturer must also provide information to the owner and operator of the certified stationary SI engine regarding the configuration that is most conducive to reduced emissions where the engine will be operated on gaseous fuels with different quality than the fuel that it was certified to.

(g) A stationary SI engine manufacturer may certify an engine family solely to the standards applicable to landfill/digester gas engines as specified in §60.4231(d) or (e), as applicable, but must certify their engines for operation using landfill/digester gas and must add a permanent label stating that the engine is for use only in landfill/digester gas applications. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(h) For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

(i) For engines being certified to the voluntary certification standards in Table 1 of this subpart, the VOC measurement shall be made by following the procedures in 40 CFR 1065.260 and 1065.265 in order to determine the total NMHC emissions by using a flame-ionization detector and non-methane cutter. As an alternative to the nonmethane cutter, manufacturers may use a gas chromatograph as allowed under 40 CFR 1065.267 and may measure ethane, as well as methane, for excluding such levels from the total VOC measurement.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59176, Oct. 8, 2008; 76 FR 37974, June 28, 2011]

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§60.4242 What other requirements must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Stationary SI internal combustion engine manufacturers must meet the provisions of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as applicable, as well as 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1048 or 1054, except that engines certified pursuant to the voluntary certification procedures in §60.4241 are subject only to the provisions indicated in §60.4247 and are permitted to provide instructions to owners and operators allowing for deviations from certified configurations, if such deviations are consistent with the provisions of paragraphs §60.4241(c) through (f). Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, as applicable. Labels on engines certified to 40 CFR part 1048 must refer to stationary engines, rather than or in addition to nonroad engines, as appropriate.

(b) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054 for that model year may certify any such family that contains both nonroad and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts. This provision also applies to equipment or component manufacturers certifying to standards under 40 CFR part 1060.

(c) Manufacturers of engine families certified to 40 CFR part 1048 may meet the labeling requirements referred to in paragraph (a) of this section for stationary SI ICE by either adding a separate

label containing the information required in paragraph (a) of this section or by adding the words “and stationary” after the word “nonroad” to the label.

(d) For all engines manufactured on or after January 1, 2011, and for all engines with a maximum engine power greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, a stationary SI engine manufacturer that certifies an engine family solely to the standards applicable to emergency engines must add a permanent label stating that the engines in that family are for emergency use only. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(e) All stationary SI engines subject to mandatory certification that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230. Stationary SI engines subject to standards in 40 CFR part 90 may use the provisions in 40 CFR 90.909. Manufacturers of stationary engines with a maximum engine power greater than 25 HP that are not certified to standards and other requirements under 40 CFR part 1048 are subject to the labeling provisions of 40 CFR 1048.20 pertaining to excluded stationary engines.

(f) For manufacturers of gaseous-fueled stationary engines required to meet the warranty provisions in 40 CFR 90.1103 or 1054.120, we may establish an hour-based warranty period equal to at least the certified emissions life of the engines (in engine operating hours) if we determine that these engines are likely to operate for a number of hours greater than the applicable useful life within 24 months. We will not approve an alternate warranty under this paragraph (f) for nonroad engines. An alternate warranty period approved under this paragraph (f) will be the specified number of engine operating hours or two years, whichever comes first. The engine manufacturer shall request this alternate warranty period in its application for certification or in an earlier submission. We may approve an alternate warranty period for an engine family subject to the following conditions:

(1) The engines must be equipped with non-resettable hour meters.

(2) The engines must be designed to operate for a number of hours substantially greater than the applicable certified emissions life.

(3) The emission-related warranty for the engines may not be shorter than any published warranty offered by the manufacturer without charge for the engines. Similarly, the emission-related warranty for any component shall not be shorter than any published warranty offered by the manufacturer without charge for that component.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008]

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COMPLIANCE REQUIREMENTS FOR OWNERS AND OPERATORS

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§60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

(i) If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

(iii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct

subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(c) If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in §60.4233(f).

(d) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (d)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.

(f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

(h) If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in paragraphs (h)(1) through (h)(4) of this section.

(1) Purchasing an engine certified according to 40 CFR part 1048. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(i) If you are an owner or operator of a modified or reconstructed stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according to one of the methods specified in paragraphs (i)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4233(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4244. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

TESTING REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4244 What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 1)}$$

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Where:

ER = Emission rate of NO_x in g/HP-hr.

C_d = Measured NO_x concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_x to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 2)}$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{m}}{C_{Ai}} \qquad \text{(Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

C_{Mi} = Measured concentration of compound i in ppmv as carbon.

C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \qquad \text{(Eq. 5)}$$

Where:

C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \qquad \text{(Eq. 6)}$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

NOTIFICATION, REPORTS, AND RECORDS FOR OWNERS AND OPERATORS

§60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is

recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

(1) Name and address of the owner or operator;

(2) The address of the affected source;

(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(4) Emission control equipment; and

(5) Fuel used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.

(e) If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in §60.4243(d)(3)(i), you must submit an annual report according to the requirements in paragraphs (e)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §60.4243(d)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4243(d)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in §60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(3)(i). The report

must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013]

GENERAL PROVISIONS

§60.4246 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

MOBILE SOURCE PROVISIONS

§60.4247 What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Manufacturers certifying to emission standards in 40 CFR part 90, including manufacturers certifying emergency engines below 130 HP, must meet the provisions of 40 CFR part 90. Manufacturers certifying to emission standards in 40 CFR part 1054 must meet the provisions of 40 CFR part 1054. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060 to the extent they apply to equipment manufacturers.

(b) Manufacturers required to certify to emission standards in 40 CFR part 1048 must meet the provisions of 40 CFR part 1048. Manufacturers certifying to emission standards in 40 CFR part 1048 pursuant to the voluntary certification program must meet the requirements in Table 4 to this subpart as well as the standards in 40 CFR 1048.101.

(c) For manufacturers of stationary SI internal combustion engines participating in the voluntary certification program and certifying engines to Table 1 to this subpart, Table 4 to this subpart shows which parts of the mobile source provisions in 40 CFR parts 1048, 1065, and 1068 apply to you. Compliance with the deterioration factor provisions under 40 CFR 1048.205(n) and 1048.240 will be required for engines built new on and after January 1, 2010. Prior to January 1, 2010, manufacturers of stationary internal combustion engines participating in the voluntary certification program have the option to develop their own deterioration factors based on an engineering analysis.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008]

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DEFINITIONS

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§60.4248 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 90.105, 40 CFR 1054.107, and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

(i) 1,000 hours of operation.

(ii) Your recommended overhaul interval.

(iii) Your mechanical warranty for the engine.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as appropriate.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and carbon dioxide (CO_2).

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in §60.4243(d) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in §60.4243(d), then it is not considered to be an emergency stationary ICE under this subpart.

(1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.

(2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §60.4243(d).

(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §60.4243(d)(2)(ii) or (iii) and §60.4243(d)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining or natural gas production.

Manufacturer has the meaning given in section 216(1) of the Clean Air Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1048.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Pipeline-quality natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline-quality natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to June 12, 2006, with passive emission control technology for NO_x (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the

theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Stationary internal combustion engine test cell/stand means an engine test cell/stand, as defined in 40 CFR part 63, subpart PPPPP, that tests stationary ICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Subpart means 40 CFR part 60, subpart JJJJ.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Volatile organic compounds means volatile organic compounds as defined in 40 CFR 51.100(s).

Voluntary certification program means an optional engine certification program that manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to participate in to certify their engines to the emission standards in §60.4231(d) or (e), as applicable.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 76 FR 37974, June 28, 2011; 78 FR 6698, Jan. 30, 2013]

Table 1 to Subpart JJJJ of Part 60—NO_x, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards[a]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_x	CO	VOC[d]	NO_x	CO	VOC[d]
Non-Emergency SI Natural Gas[b] and Non-Emergency SI Lean Burn LPG[b]	100≤HP<500	7/1/2008	2.0	4.0	1.0	160	540	86
		1/1/2011	1.0	2.0	0.7	82	270	60
Non-Emergency SI Lean Burn Natural Gas and LPG	500≤HP<1,350	1/1/2008	2.0	4.0	1.0	160	540	86
		7/1/2010	1.0	2.0	0.7	82	270	60

Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500≤HP<1,350)	HP≥500	7/1/2007	2.0	4.0	1.0	160	540	86
	HP≥500	7/1/2010	1.0	2.0	0.7	82	270	60
Landfill/Digester Gas (except lean burn 500≤HP<1,350)	HP<500	7/1/2008	3.0	5.0	1.0	220	610	80
		1/1/2011	2.0	5.0	1.0	150	610	80
	HP≥500	7/1/2007	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Landfill/Digester Gas Lean Burn	500≤HP<1,350	1/1/2008	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Emergency	25<HP<130	1/1/2009	[c]10	387	N/A	N/A	N/A	N/A
	HP≥130		2.0	4.0	1.0	160	540	86

[a]Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[b]Owners and operators of new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR part 63, subpart ZZZZ, Table 2a do not have to comply with the CO emission standards of Table 1 of this subpart.

[c]The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_x + HC.

[d]For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[76 FR 37975, June 28, 2011]

Table 2 to Subpart JJJJ of Part 60—Requirements for Performance Tests

As stated in §60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load:

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary SI internal combustion engine demonstrating compliance according to §60.4244.	a. limit the concentration of NO_x in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate	(a) Alternatively, for NO_x, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be

For each	Complying with the requirement to	You must	Using	According to the following requirements
				sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ae]	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_x concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(c) Measurements to determine moisture must be made at the same time as the measurement for NO_x concentration.
		v. Measure NO_x at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	(5) Method 7E of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (Reapproved 2005)[ae], Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(d) Results of this test consist of the average of the three 1-hour or longer runs.

For each	Complying with the requirement to	You must	Using	According to the following requirements
	b. limit the concentration of CO in the stationary SI internal combustion engine exhaust.	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate	(a) Alternatively, for CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ae]	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for CO concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.
		v. Measure CO at the	(5) Method 10 of 40	(d) Results of this test

For each	Complying with the requirement to	You must	Using	According to the following requirements
		exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	CFR part 60, appendix A4, ASTM Method D6522-00 (Reapproved 2005)[ae], Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	consist of the average of the three 1-hour or longer runs.
	c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;	(1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate	(a) Alternatively, for VOC, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[ae]	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for VOC concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7	
		iv. If necessary,	(4) Method 4 of 40	(c) Measurements to

For each	Complying with the requirement to	You must	Using	According to the following requirements
		measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	determine moisture must be made at the same time as the measurement for VOC concentration.
		v. Measure VOC at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device.	(5) Methods 25A and 18 of 40 CFR part 60, appendices A-6 and A-7, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 of 40 CFR part 60, appendix A-6[cd], Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03[e]	(d) Results of this test consist of the average of the three 1-hour or longer runs.

[a]Also, you may petition the Administrator for approval to use alternative methods for portable analyzer.

[b]You may use ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses, for measuring the O_2 content of the exhaust gas as an alternative to EPA Method 3B. AMSE PTC 19.10-1981 incorporated by reference, see 40 CFR 60.17

[c]You may use EPA Method 18 of 40 CFR part 60, appendix A-6, provided that you conduct an adequate pre-survey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (*http://www.epa.gov/ttn/emc/prelim/otm11.pdf*).

[d]You may use ASTM D6420-99 (2004), Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry as an alternative to EPA Method 18 for measuring total nonmethane organic. ASTM D6420-99(2004) incorporated by reference; see 40 CFR 60.17.

[e]Incorporated by reference; see 40 CFR 60.17.

[79 FR 11253, Feb. 27, 2014]

Table 3 to Subpart JJJJ of Part 60—Applicability of General Provisions to Subpart JJJJ

[As stated in §60.4246, you must comply with the following applicable General Provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4248.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4245.
§60.8	Performance tests	Yes	Except that §60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	Yes	Requirements are specified in subpart JJJJ.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	No	
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

Table 4 to Subpart JJJJ of Part 60—Applicability of Mobile Source Provisions for Manufacturers Participating in the Voluntary Certification Program and Certifying Stationary SI ICE to Emission Standards in Table 1 of Subpart JJJJ

[As stated in §60.4247, you must comply with the following applicable mobile source provisions if you are a manufacturer participating in the voluntary certification program and certifying stationary SI ICE to emission standards in Table 1 of subpart JJJJ]

Mobile source provisions citation	Subject of citation	Applies to subpart	Explanation
1048 subpart A	Overview and Applicability	Yes	
1048 subpart B	Emission Standards and Related Requirements	Yes	Except for the specific sections below.
1048.101	Exhaust Emission Standards	No	
1048.105	Evaporative Emission Standards	No	
1048.110	Diagnosing Malfunctions	No	
1048.140	Certifying Blue Sky Series Engines	No	
1048.145	Interim Provisions	No	
1048 subpart C	Certifying Engine Families	Yes	Except for the specific sections below.
1048.205(b)	AECD reporting	Yes	
1048.205(c)	OBD Requirements	No	
1048.205(n)	Deterioration Factors	Yes	Except as indicated in 60.4247(c).
1048.205(p)(1)	Deterioration Factor Discussion	Yes	
1048.205(p)(2)	Liquid Fuels as they require	No	
1048.240(b)(c)(d)	Deterioration Factors	Yes	
1048 subpart D	Testing Production-Line Engines	Yes	
1048 subpart E	Testing In-Use Engines	No	
1048 subpart F	Test Procedures	Yes	
1065.5(a)(4)	Raw sampling (refers reader back to the specific emissions regulation for guidance)	Yes	
1048 subpart G	Compliance Provisions	Yes	
1048 subpart H	Reserved		
1048 subpart I	Definitions and Other Reference Information	Yes	
1048 appendix I and II	Yes		

1065 (all subparts)	Engine Testing Procedures	Yes	Except for the specific section below.
1065.715	Test Fuel Specifications for Natural Gas	No	
1068 (all subparts)	General Compliance Provisions for Nonroad Programs	Yes	Except for the specific sections below.
1068.245	Hardship Provisions for Unusual Circumstances	No	
1068.250	Hardship Provisions for Small-Volume Manufacturers	No	
1068.255	Hardship Provisions for Equipment Manufacturers and Secondary Engine Manufacturers	No	

Title 40: Protection of Environment
PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

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SOURCE: 69 FR 33506, June 15, 2004, unless otherwise noted.

WHAT THIS SUBPART COVERS

§63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

§63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

§63.6595 When do I have to comply with this subpart?

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

EMISSION AND OPERATING LIMITATIONS

§63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

§63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

[78 FR 6701, Jan. 30, 2013]

§63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less

than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in §63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

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§63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any

existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

GENERAL COMPLIANCE REQUIREMENTS

§63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

TESTING AND INITIAL COMPLIANCE REQUIREMENTS

§63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

§63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

§63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

§63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (Eq.\ 1)$$

Where:

C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

C_o = concentration of CO, THC, or formaldehyde at the control device outlet, and

R = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209\ F_d}{F_c} \quad (Eq.\ 2)$$

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu)

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO2} = \frac{5.9}{F_o} \quad (Eq.\ 3)$$

Where:

X_{CO2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2—15 percent O_2, the defined O_2 correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \quad (Eq.\ 4)$$

Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O_2.

C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected.

X_{CO2} = CO_2 correction factor, percent.

$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR,

or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010; 78 FR 6702, Jan. 30, 2013]

§63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O_2 or CO_2 according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2 concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (*e.g.,* thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).

(1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning

limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

§63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

CONTINUOUS COMPLIANCE REQUIREMENTS

§63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

§63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you

must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or

more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak

shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

NOTIFICATIONS, REPORTS, AND RECORDS

§63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in §63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in §63.6603(d) and identifying the state or local regulation that the engine is subject to.

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013]

§63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

§63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

§63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

OTHER REQUIREMENTS AND INFORMATION

§63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Backup power for renewable energy means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see §63.14).

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Public Law 101-549, 104 Stat. 2399).

Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (*e.g.* biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

Institutional emergency stationary RICE means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_x) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_x, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.,* remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to

§63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Remote stationary RICE means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is

less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_x (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]

Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2	

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and using NSCR;	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.[1]
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and not using NSCR.	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2 until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP

As stated in §§63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.[1]
2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
	b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.[1]
3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and	Comply with any operating limitations approved by the Administrator.
New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and	
existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation	

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
catalyst.	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]

Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency stationary CI RICE and black start stationary CI RICE[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[3]
2. Non-Emergency, non-black start stationary CI RICE <100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
3. Non-Emergency, non-black start	Limit concentration of CO in	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
CI stationary RICE 100≤HP≤300 HP	the stationary RICE exhaust to 230 ppmvd or less at 15 percent O_2.	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[2]	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O_2.	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O_2.	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O_2.	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2.	

[1]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[2]Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

[3]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[1] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	
10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of	

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
	operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install NSCR to reduce HAP emissions from the stationary RICE.	
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[78 FR 6709, Jan. 30, 2013]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE ≥5,000 HP located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

[1]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6711, Jan. 30, 2013]

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI	a. reduce CO emissions	i. Select the sampling port location and the number/location of		(a) For CO and O_2 measurement, ducts ≤6 inches in diameter may be

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
stationary RICE		traverse points at the inlet and outlet of the control device; and		sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Measure the O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[ac] (heated probe not necessary)	(b) Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.
		iii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005)[abc] (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4	(c) The CO concentration must be at 15 percent O_2, dry basis.
2. 4SRB stationary RICE	a. reduce formaldehyde emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For formaldehyde, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60,

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
				appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A.
		ii. Measure O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[a] (heated probe not necessary)	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde or THC concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03[a]	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formalde-hyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03[a], provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A-7	(a) THC concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. limit the concentra-tion of formalde-hyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE; and		(a) For formaldehyde, CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
				sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[a] (heated probe not necessary)	(a) Measurements to determine O_2 concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iii. Measure moisture content of the station-ary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03[a]	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formalde-hyde at the exhaust of the station-ary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03[a], provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. measure CO at the exhaust of the station-ary RICE	(1) Method 10 of 40 CFR part 60, appendix A-4, ASTM Method	(a) CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
			D6522-00 (2005)[ac], Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03[a]	the average of the three 1-hour or longer runs.

[a]You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[b]You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[79 FR 11290, Feb. 27, 2014]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and not using oxidation catalyst	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at the outlet of the oxidation

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
stationary CI RICE >500 HP located at an area source of HAP		catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
		initial performance test.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Reduce CO emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2;
		ii. You have installed a CPMS to

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
		continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O_2, or the average reduction of emissions of THC is 30 percent or more;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

[78 FR 6712, Jan. 30, 2013]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[a]; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[a]; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent.[a]
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB	a. Limit the concentration of formaldehyde in the stationary RICE	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a];

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
stationary RICE 250≤HP≤500 located at a major source of HAP	exhaust and not using oxidation catalyst or NSCR	and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		§63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an	a. Install NSCR	i. Conducting annual compliance demonstrations as specified in

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year		§63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O_2, or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

[a]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6715, Jan. 30, 2013]

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP			
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
		c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.
3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Compliance report	a. The results of the annual compliance demonstration, if conducted during the reporting period.	i. Semiannually according to the requirements in §63.6650(b)(1)-(5).
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in §63.6640(f)(4)(ii)	Report	a. The information in §63.6650(h)(1)	i. annually according to the requirements in §63.6650(h)(2)-(3).

[78 FR 6719, Jan. 30, 2013]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in §63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
	monitoring systems		
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as	

General provisions citation	Subject of citation	Applies to subpart	Explanation
		specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010, as amended at 78 FR 6720, Jan. 30, 2013]

Appendix A to Subpart ZZZZ of Part 63—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

1.0 SCOPE AND APPLICATION. WHAT IS THIS PROTOCOL?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O_2) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O_2).

Analyte	**CAS No.**	**Sensitivity**
Carbon monoxide (CO)	630-08-0	Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.
Oxygen (O_2)	*7782-44-7*	

1.2 Applicability. When is this protocol acceptable?

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

1.3 Data Quality Objectives. How good must my collected data be?

Refer to Section 13 to verify and document acceptable analyzer performance.

1.4 Range. What is the targeted analytical range for this protocol?

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O_2, or no more than twice the permitted CO level.

1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

2.0 Summary of Protocol

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O_2 gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

3.0 Definitions

3.1 Measurement System. The total equipment required for the measurement of CO and O_2 concentrations. The measurement system consists of the following major subsystems:

3.1.1 Data Recorder. A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

3.1.2 Electrochemical (EC) Cell. A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

3.1.3 Interference Gas Scrubber. A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

3.1.4 Moisture Removal System. Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

3.1.5 Sample Interface. The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

3.2 Nominal Range. The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

3.3 Calibration Gas. A vendor certified concentration of a specific analyte in an appropriate balance gas.

3.4 Zero Calibration Error. The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

3.5 Up-Scale Calibration Error. The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

3.6 Interference Check. A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

3.7 Repeatability Check. A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

3.8 Sample Flow Rate. The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

3.9 Sampling Run. A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O_2 and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any

interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre- sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

3.10 Sampling Day. A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check. The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.

3.12 Performance-Established Configuration. The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

4.0 INTERFERENCES.

When present in sufficient concentrations, NO and NO_2 are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

5.0 SAFETY. [RESERVED]

6.0 EQUIPMENT AND SUPPLIES.

6.1 What equipment do I need for the measurement system?

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

6.2 Measurement System Components.

6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

6.2.2 Sample Line. Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

6.2.4 Particulate Filter (optional). Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

6.2.5 Sample Pump. A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.8 Sample Flow Rate Monitoring. An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

6.2.9 Sample Gas Manifold (optional). A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O_2 concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O_2; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

7.0 Reagents and Standards. What calibration gases are needed?

7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O_2. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ±5 percent of the label value. Dry ambient air (20.9 percent O_2) is acceptable for calibration of the O_2 cell. If needed, any lower percentage O_2 calibration gas must be a mixture of O_2 in nitrogen.

7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

7.1.2 Up-Scale O_2 Calibration Gas Concentration.

Select an O_2 gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O_2. When the average exhaust gas O_2 readings are above 6 percent, you may use dry ambient air (20.9 percent O_2) for the up-scale O_2 calibration gas.

7.1.3 Zero Gas. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO_2).

8.0 Sample Collection and Analysis

8.1 Selection of Sampling Sites.

8.1.1 Control Device Inlet. Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.1.2 Exhaust Gas Outlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the “sample conditioning phase” once per minute until constant readings are obtained. Then begin the “measurement data phase” and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the “measurement data phase” readings to calculate the average stack gas CO and O_2 concentrations.

8.3 EC Cell Rate. Maintain the EC cell sample flow rate so that it does not vary by more than ±10 percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than ±3 percent, as instructed by the EC cell manufacturer.

9.0 Quality Control (Reserved)

10.0 Calibration and Standardization

10.1 Pre-Sampling Calibration. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

10.1.1 Zero Calibration. For both the O_2 and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ±3 percent of the up-scale gas value or ±1 ppm, whichever is less restrictive, for the CO channel and less than or equal to ±0.3 percent O_2 for the O_2 channel.

10.1.3 Up-Scale Calibration. Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this "sample conditioning phase" once per minute until readings are constant for at least two minutes. Then begin the "measurement data phase" and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

10.1.4 Up-Scale Calibration Error. The mean of the difference of the "measurement data phase" readings from the reported standard gas value must be less than or equal to ±5 percent or ±1 ppm for CO or ±0.5 percent O_2, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single "measurement data phase" reading must be less than or equal to ±2 percent or ±1 ppm for CO or ±0.5 percent O_2, whichever is less restrictive, respectively.

10.2 Post-Sampling Calibration Check. Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

11.0 Analytical Procedure

The analytical procedure is fully discussed in Section 8.

12.0 Calculations and Data Analysis

Determine the CO and O_2 concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the "measurement data phase".

13.0 Protocol Performance

Use the following protocols to verify consistent analyzer performance during each field sampling day.

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the "measurement data phase". The maximum allowable deviation from the mean for each of the individual readings is ±2 percent, or ±1 ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

Example: A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than ±2 percent *or* ±1 ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed).

13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO_2 gas standards that are generally recognized as representative of diesel-fueled engine NO and NO_2 emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

13.2.1 Interference Response. The combined NO and NO_2 interference response should be less than or equal to ±5 percent of the up-scale CO calibration gas concentration.

13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

13.3.2 Repeatability Check Calculations. Determine the highest and lowest average "measurement data phase" CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ±3 percent or ±1 ppm of the up-scale gas value, whichever is less restrictive.

14.0 Pollution Prevention (Reserved)

15.0 Waste Management (Reserved)

16.0 Alternative Procedures (Reserved)

17.0 References

(1) "Development of an Electrochemical Cell Emission Analyzer Test Protocol", Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.

(2) "Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers", EMC Conditional Test Protocol 30 (CTM-30), Gas Research Institute Protocol GRI-96/0008, Revision 7, October 13, 1997.

(3) "ICAC Test Protocol for Periodic Monitoring", EMC Conditional Test Protocol 34 (CTM-034), The Institute of Clean Air Companies, September 8, 1999.

(4) "Code of Federal Regulations", Protection of Environment, 40 CFR, Part 60, Appendix A, Methods 1-4; 10.

Table 1: Appendix A—Sampling Run Data.

Facility_____ Engine I.D._____ Date_____											
Run Type:	(_)		(_)				(_)				(_)
(X)	Pre-Sample Calibration		Stack Gas Sample				Post-Sample Cal. Check				Repeatability Check
Run #	1	1	2	2	3	3	4	4	Time	Scrub. OK	Flow- Rate
Gas	O_2	CO	O_2	CO	O_2	CO	O_2	CO			

Sample Cond. Phase											
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Measurement Data Phase											
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[78 FR 6721, Jan. 30, 2013]

Title 40: Protection of Environment
PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart PPPPP—National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands

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Source: 68 FR 28785, May 27, 2003, unless otherwise noted.

What This Subpart Covers

§63.9280 What is the purpose of subpart PPPPP?

This subpart PPPPP establishes national emission standards for hazardous air pollutants (NESHAP) for engine test cells/stands located at major sources of hazardous air pollutants (HAP) emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations contained in this NESHAP.

§63.9285 Am I subject to this subpart?

You are subject to this subpart if you own or operate an engine test cell/stand that is located at a major source of HAP emissions.

(a) An engine test cell/stand is any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines.

(b) An uninstalled engine is an engine that is not installed in, or an integrated part of, the final product.

(c) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

§63.9290 What parts of my plant does this subpart cover?

This subpart applies to each new, reconstructed, or existing affected source.

(a) *Affected source.* An affected source is the collection of all equipment and activities associated with engine test cells/stands used for testing uninstalled stationary or uninstalled mobile (motive) engines located at a major source of HAP emissions.

(1) *Existing affected source.* An affected source is existing if you commenced construction or reconstruction of the affected source on or before May 14, 2002. A change in ownership of an existing affected source does not make that affected source a new or reconstructed affected source.

(2) *New affected source.* An affected source is new if you commenced construction of the affected source after May 14, 2002.

(3) *Reconstructed affected source.* An affected source is reconstructed if you meet the definition of reconstruction in §63.2 of subpart A of this part and reconstruction is commenced after May 14, 2002.

Changes made to an existing affected source primarily for the purpose of complying with revisions to engine testing requirements under 40 CFR parts 80, 86, 89, 90, 91, or 92 are not considered a modification or reconstruction. In addition, passive measurement and control instrumentation and electronics are not included as part of any affected source reconstruction evaluation.

(b) Existing affected sources do not have to meet the requirements of this subpart and of subpart A of this part.

(c) Any portion of a new or reconstructed affected source located at a major source that is used exclusively for testing internal combustion engines with rated power of less than 25 horsepower (hp) (19 kilowatts(kW)) does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.9345(b).

(d) Any portion of a new or reconstructed affected source located at a major source that meets any of the criteria specified in paragraphs (d)(1) through (4) of this section does not have to meet the requirements of this subpart and of subpart A of this part.

(1) Any portion of the affected source used exclusively for testing combustion turbine engines.

(2) Any portion of the affected source used exclusively for testing rocket engines.

(3) Any portion of the affected source used in research and teaching activities at facilities that are not engaged in the development of engines or engine test services for commercial purposes.

(4) Any portion of the affected source operated to test or evaluate fuels (such as knock engines), transmissions, or electronics.

§63.9295 When do I have to comply with this subpart?

(a) *Affected sources.* (1) If you start up your new or reconstructed affected source before May 27, 2003, you must comply with the emission limitations in this subpart no later than May 27, 2003.

(2) If you start up your new or reconstructed affected source on or after May 27, 2003, you must comply with the emission limitations in this subpart upon startup.

(b) *Area sources that become major sources.* If your new or reconstructed affected source is located at an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, your new or reconstructed affected source must be in compliance with this subpart when the area source becomes a major source.

(c) You must meet the notification requirements in §63.9345 and in 40 CFR part 63, subpart A.

Emission Limitations

§63.9300 What emission limitations must I meet?

For each new or reconstructed affected source that is used in whole or in part for testing internal combustion engines with rated power of 25 hp (19 kW) or more and that is located at a major source, you must comply with the emission limitations in Table 1 to this subpart. (Tables are found at the end of this subpart.)

§63.9301 What are my options for meeting the emission limits?

You may use either a continuous parameter monitoring system (CPMS) or a continuous emission monitoring system (CEMS) to demonstrate compliance with the emission limitations. Continuous monitoring systems must meet the requirements in §63.9306 (CPMS) and §63.9307 (CEMS).

§63.9302 What operating limits must I meet?

(a) For any new or reconstructed affected source on which you use add-on controls, you must meet the operating limits specified in Table 2 to this subpart. These operating limits must be established during the performance test according to the requirements in §63.9324. You must meet the operating limits at all times after you establish them.

(b) If you use an add-on control device other than those listed in Table 2 to this subpart, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under §63.8(f).

General Compliane Requirements

§63.9305 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitation that applies to you at all times, except during periods of startup, shutdown, or malfunction (SSM) of your control device or associated monitoring equipment.

(b) If you must comply with the emission limitation, you must operate and maintain your engine test cell/stand, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times.

(c) You must develop a written SSM plan (SSMP) for emission control devices and associated monitoring equipment according to the provisions in §63.6(e)(3). The plan will apply only to emission control devices, and not to engine test cells/stands.

[68 FR 28785, May 27, 2003, as amended at 71 FR 20470, Apr. 20, 2006]

§63.9306 What are my continuous parameter monitoring system (CPMS) installation, operation, and maintenance requirements?

(a) *General.* You must install, operate, and maintain each CPMS specified in paragraphs (c) and (d) of this section according to paragraphs (a)(1) through (7) of this section. You must install, operate, and maintain each CPMS specified in paragraph (b) of this section according to paragraphs (a)(3) through (5) of this section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.

(2) You must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.

(3) You must record the results of each inspection, calibration, and validation check of the CPMS.

(4) You must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.

(5) You must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that an engine test cell/stand is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).

(6) You must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.

(7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

(b) *Capture system bypass line.* You must meet the requirements of paragraphs (b)(1) and (2) of this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

(1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (b)(1)(i) through (iv) of this section.

(i) *Flow control position indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.

(ii) *Car-seal or lock-and-key valve closures.* Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.

(iii) *Valve closure monitoring.* Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.

(iv) *Automatic shutdown system.* Use an automatic shutdown system in which the engine testing operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when an engine test cell/stand is operating. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the engine test cell/stand in operation.

(2) If any bypass line is opened, you must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in §63.9350.

(c) *Thermal oxidizers and catalytic oxidizers.* If you are using a thermal oxidizer or catalytic oxidizer as an add-on control device, you must comply with the requirements in paragraphs (c)(1) through (3) of this section.

(1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.

(2) For a catalytic oxidizer, you must install a gas temperature monitor in the gas stream immediately before the catalyst bed, and if you established operating limits according to §63.9324(b)(1) and (2), also install a gas temperature monitor in the gas stream immediately after the catalyst bed.

(i) If you establish operating limits according to §63.9324(b)(1) and (2), then you must install the gas temperature monitors both upstream and downstream of the catalyst bed. The temperature monitors must be in the gas stream immediately before and after the catalyst bed to measure the temperature difference across the bed.

(ii) If you establish operating limits according to §63.9324(b)(3) and (4), then you must install a gas temperature monitor upstream of the catalyst bed. The temperature monitor must be in the gas stream immediately before the catalyst bed to measure the temperature.

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (vii) of this section for each gas temperature monitoring device.

(i) Locate the temperature sensor in a position that provides a representative temperature.

(ii) Use a temperature sensor with a measurement sensitivity of 4 degrees Fahrenheit or 0.75 percent of the temperature value, whichever is larger.

(iii) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(iv) If a gas temperature chart recorder is used, it must have a measurement sensitivity in the minor division of at least 20 degrees Fahrenheit.

(v) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owner's manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed near the process temperature sensor must yield a reading within 30 degrees Fahrenheit of the process temperature sensor reading.

(vi) Conduct calibration and validation checks anytime the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(vii) At least monthly, inspect components for integrity and electrical connections for continuity, oxidation, and galvanic corrosion.

(d) Emission capture systems. The capture system monitoring system must comply with the applicable requirements in paragraphs (d)(1) and (2) of this section.

(1) For each flow measurement device, you must meet the requirements in paragraphs (a) and (d)(1)(i) through (iv) of this section.

(i) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.

(ii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(iii) Conduct a flow sensor calibration check at least semiannually.

(iv) At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.

(2) For each pressure drop measurement device, you must comply with the requirements in paragraphs (a) and (d)(2)(i) through (vi) of this section.

(i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening you are monitoring.

(ii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(iii) Check pressure tap pluggage daily.

(iv) Using an inclined manometer with a measurement sensitivity of 0.0002 inch water, check gauge calibration quarterly and transducer calibration monthly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(vi) At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.

§63.9307 What are my continuous emissions monitoring system installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each CEMS to monitor carbon monoxide (CO) or total hydrocarbons (THC) and oxygen (O_2) at the outlet of the exhaust system of the engine test cell/stand or at the outlet of the emission control device.

(b) To comply with the CO or THC percent reduction emission limitation, you may install, operate, and maintain a CEMS to monitor CO or THC and O_2 at both the inlet and the outlet of the emission control device.

(c) To comply with either emission limitations, the CEMS must be installed and operated according to the requirements described in paragraphs (c)(1) through (4) of this section.

(1) You must install, operate, and maintain each CEMS according to the applicable Performance Specification (PS) of 40 CFR part 60, appendix B (PS-3 or PS-4A).

(2) You must conduct a performance evaluation of each CEMS according to the requirements in 40 CFR 63.8 and according to PS-3 of 40 CFR part 60, appendix B, using Reference Method 3A or 3B for the O_2 CEMS, and according to PS-4A of 40 CFR part 60, appendix B, using Reference Method 10 or 10B for the CO CEMS. If the fuel used in the engines being tested is natural gas, you may use ASTM D 6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers (incorporated by reference, see §63.14). As an

alternative to Method 3B, you may use ANSI/ASME PTC 19.10-1981, “Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus],” (incorporated by reference, see §63.14).

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, each representing a different 15-minute period within the same hour, to have a valid hour of data.

(4) All CEMS data must be reduced as specified in §63.8(g)(2) and recorded as CO concentration in parts per million by volume, dry basis (ppmvd), corrected to 15 percent O_2 content.

(d) If you have CEMS that are subject to paragraph (a) or (b) of this section, you must properly maintain and operate the monitors continuously according to the requirements described in paragraphs (d)(1) and (2) of this section.

(1) *Proper maintenance.* You must maintain the monitoring equipment at all times that the engine test cell/stand is operating, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(2) *Continued operation.* You must operate your CEMS according to paragraphs (d)(2)(i) and (ii) of this section.

(i) You must conduct all monitoring in continuous operation at all times that the engine test cell/stand is operating, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration drift checks and required zero and high-level adjustments). Quality assurance or control activities must be performed according to procedure 1 of 40 CFR part 60, appendix F.

(ii) Data recorded during monitoring malfunctions, associated repairs, out-of-control periods, and required quality assurance or control activities must not be used for purposes of calculating data averages. You must use all of the data collected from all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring equipment to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

Testing and Initial Compliance Requirements

§63.9310 By what date must I conduct the initial compliance demonstrations?

You must conduct the initial compliance demonstrations that apply to you in Table 3 to this subpart within 180 calendar days after the compliance date that is specified for your new or reconstructed affected source in §63.9295 and according to the provisions in §63.7(a)(2).

§63.9320 What procedures must I use?

(a) You must conduct each initial compliance demonstration that applies to you in Table 3 to this subpart.

(b) You must conduct an initial performance evaluation of each capture and control system according to §§63.9321, 63.9322, 63.9323 and 63.9324, and each CEMS according to the requirements in 40 CFR 63.8 and according to the applicable Performance Specification of 40 CFR part 60, appendix B (PS-3 or PS-4A).

(c) The initial demonstration of compliance with the carbon monoxide (CO) or total hydrocarbon (THC) concentration limitation consists of the first 4-hour rolling average CO or THC concentration recorded after completion of the CEMS performance evaluation. You must correct the CO or THC concentration at the outlet of the engine test cell/stand or the emission control device to a dry basis and to 15 percent O_2 content according to Equation 1 of this section:

$$C_c = C_{unc}\left(\frac{5.9}{(20.9 - \%O_{2d})}\right) \qquad \text{(Eq. 1)}$$

Where:

C_c = concentration of CO or THC, corrected to 15 percent oxygen, ppmvd

C_{unc} = total uncorrected concentration of CO or THC, ppmvd

$\%O_{2d}$ = concentration of oxygen measured in gas stream, dry basis, percent by volume.

(d) The initial demonstration of compliance with the CO or THC percent reduction emission limitation consists of the first 4-hour rolling average percent reduction in CO or THC recorded after completion of the performance evaluation of the capture/control system and/or CEMS. You must complete the actions described in paragraphs (d)(1) through (2) of this section.

(1) Correct the CO or THC concentrations at the inlet and outlet of the emission control device to a dry basis and to 15 percent O_2 content using Equation 1 of this section.

(2) Calculate the percent reduction in CO or THC using Equation 2 of this section:

$$R = \frac{C_i - C_o}{C_i} \times 100 \qquad \text{(Eq. 2)}$$

Where:

R = percent reduction in CO or THC

C_i = corrected CO or THC concentration at inlet of the emission control device

C_o = corrected CO or THC concentration at the outlet of the emission control device.

§63.9321 What are the general requirements for performance tests?

(a) You must conduct each performance test required by §63.9310 according to the requirements in §63.7(e)(1) and under the conditions in this section unless you obtain a waiver of the performance test according to the provisions in §63.7(h).

(1) *Representative engine testing conditions.* You must conduct the performance test under representative operating conditions for the test cell/stand. Operations during periods of SSM, and during periods of nonoperation do not constitute representative conditions. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation.

(2) *Representative emission capture system and add-on control device operating conditions.* You must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. You must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

(b) You must conduct each performance test of an emission capture system according to the requirements in §63.9322. You must conduct each performance test of an add-on control device according to the requirements in §63.9323.

§63.9322 How do I determine the emission capture system efficiency?

You must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by §63.9310.

(a) *Assuming 100 percent capture efficiency.* You may assume the capture system efficiency is 100 percent if both conditions in paragraphs (a)(1) and (2) of this section are met:

(1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a potential to emit (PTE) and directs all the exhaust gases from the enclosure to an add-on control device.

(2) All engine test operations creating exhaust gases for which the test is applicable are conducted within the capture system.

(b) *Measuring capture efficiency.* If the capture system does not meet the criteria in paragraphs (a)(1) and (2) of this section, then you must use one of the two protocols described in paragraphs (c) and (d) of this section to measure capture efficiency. The capture efficiency measurements use total volatile hydrocarbon (TVH) capture efficiency as a surrogate for organic HAP capture efficiency. For the protocol in paragraph (c) of this section, the capture efficiency measurement must consist of three test runs. Each test run must be at least 3 hours in duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single engine test to go from the beginning to the end.

(c) *Gas-to-gas protocol using a temporary total enclosure or a building enclosure.* The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (c)(1) through (5) of this section to measure emission capture system efficiency using the gas-to-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the engine test cell/stand and all areas where emissions from the engine testing subsequently occur. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204B or 204C of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) The sampling points for the Method 204B or 204C of appendix M to 40 CFR part 51 measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and entering the add-on control device.

(ii) If multiple emission streams from the capture system enter the add-on control device without a single common duct, then the emissions entering the add-on control device must be simultaneously measured in each duct, and the total emissions entering the add-on control device must be determined.

(3) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.

(ii) Use Method 204E of appendix M to 40 CFR part 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the engine test cell/stand operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(4) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 1 of this section:

$$CE = \frac{TVH_{captured}}{\left(TVH_{captured} + TVH_{uncaptured}\right)} \times 100 \qquad \text{(Eq. 1)}$$

Where:

CE = capture efficiency of the emission capture system vented to the add-on control device, percent

$TVH_{captured}$ = total mass of TVH captured by the emission capture system as measured at the inlet to the add-on control device during the emission capture efficiency test run, kg, determined according to paragraph (c)(2) of this section

$TVH_{uncaptured}$ = total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg, determined according to paragraph (c)(3) of this section.

(5) Determine the capture efficiency the emission capture system as the average of the capture efficiencies measured in the three test runs.

(d) *Alternative capture efficiency protocol.* As an alternative to the procedure specified in paragraph (c) of this section, you may determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the data quality objective or lower control limit approach as described in appendix A to subpart KK of this part.

§63.9323 How do I determine the add-on control device emission destruction or removal efficiency?

You must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by §63.9310. You must conduct three test runs as specified in §63.7(e)(3), and each test run must last at least 1 hour.

(a) For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.

(1) Use Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight. The ANSI/ASME PTC 19.10-1981 Part 10 is an acceptable alternative to Method 3B (incorporated by reference, see §63.14).

(4) Use Method 4 of appendix A to 40 CFR part 60, to determine stack gas moisture.

(5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60, as specified in paragraphs (b)(1) through (3) of this section. You must use the same method for both the inlet and outlet measurements.

(1) Use Method 25 of appendix A to 40 CFR part 60 if the add-on control device is an oxidizer, and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million at the control device outlet.

(2) Use Method 25A of appendix A to 40 CFR part 60 if the add-on control device is an oxidizer, and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.

(c) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, you must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions.

$$M_f = Q_{sd} C_c (12)(0.0416)(10^{-6}) \qquad \text{(Eq. 1)}$$

Where:

M_f = total gaseous organic emissions mass flow rate, kg/hour (kg/h)

C_c = concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis

Q_{sd} = volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h)

0.0416 = conversion factor for molar volume, kg-moles per cubic meter (mol/m^3) (@ 293 Kelvin [K] and 760 millimeters of mercury [mmHg]).

(d) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$DRE = 100 \times \frac{M_{fi} - M_{fo}}{M_{fi}} \qquad \text{(Eq. 2)}$$

Where:

DRE = organic emissions destruction or removal efficiency of the add-on control device, percent

M_{fi} = total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h

M_{fo} = total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

(e) Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

§63.9324 How do I establish the emission capture system and add-on control device operating limits during the performance test?

During the performance test required by §63.9310, you must establish the operating limits required by §63.9302 according to this section, unless you have received approval for alternative monitoring and operating limits under §63.8(f) as specified in §63.9302.

(a) *Thermal oxidizers.* If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) *Catalytic oxidizers.* If your add-on control device is a catalytic oxidizer, establish the operating limits according to either paragraphs (b)(1) and (2) or paragraphs (b)(3) and (4) of this section.

(1) During the performance test, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.

(2) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.

(3) As an alternative to monitoring the temperature difference across the catalyst bed, you may monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(4) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

(4) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (b)(3) of this section. The plan must address, at a minimum, the elements specified in paragraphs (b)(4)(i) through (iii) of this section.

(i) Annual sampling and analysis of the catalyst activity (i.e., conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures.

(ii) Monthly inspection of the oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.

(iii) Annual internal and monthly external visual inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found, you must take corrective action consistent with the manufacturer's recommendation and conduct a new performance test to determine destruction efficiency according to §63.9323.

(c) *Emission capture system.* For each capture device that is not part of a PTE that meets the criteria of §63.9322(a), establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (c)(1) and (2) of this section. The operating limit for a PTE is specified in Table 3 to this subpart.

(1) During the capture efficiency determination required by §63.9310, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

(2) Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

§63.9330 How do I demonstrate initial compliance with the emission limitation?

(a) You must demonstrate initial compliance with the emission limitation that applies to you according to Table 3 to this subpart.

(b) You must submit the Notification of Compliance Status containing results of the initial compliance demonstration according to the requirements in §63.9345(c).

Continuous Compliance Requirements

§63.9335 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitor malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration drift checks and required zero and high-level adjustments of the monitoring system), you must conduct all monitoring in continuous operation at all times the engine test cell/stand is operating.

(b) Do not use data recorded during monitor malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of this subpart, including data averages and calculations. You must use all the data collected during all other periods in assessing the performance of the emission control device or in assessing emissions from the new or reconstructed affected source.

§63.9340 How do I demonstrate continuous compliance with the emission limitations?

(a) You must demonstrate continuous compliance with the emission limitation in Table 1 to this subpart that applies to you according to methods specified in Table 5 to this subpart.

(b) You must report each instance in paragraphs (b)(1) and (2) of this section. These instances are deviations from the emission limitation in this subpart and must be reported according to the requirements in §63.9350.

(1) You must report each instance in which you did not meet the emission limitation that applies to you.

(2) You must report each instance in which you did not meet the requirements in Table 7 to this subpart that apply to you.

(c) *Startups, shutdowns, and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of SSM of control devices and associated monitoring equipment are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1).

(2) The Administrator will determine whether deviations that occur during a period of SSM of control devices and associated monitoring equipment are violations, according to the provisions in §63.6(e).

[68 FR 28785, May 27, 2003, as amended at 71 FR 20470, Apr. 20, 2006]

Notifications, Reports, and Records

§63.9345 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.8(e), 63.8(f)(4) and (6), and 63.9(b), (g)(1), (g)(2) and (h) that apply to you by the dates specified.

(b) If you own or operate a new or reconstructed test cell/stand used for testing internal combustion engines, you are required to submit an Initial Notification as specified in paragraphs (b)(1) through (3) of this section.

(1) As specified in §63.9(b)(2), if you start up your new or reconstructed affected source before the effective date of this subpart, you must submit an Initial Notification not later than 120 calendar days after May 27, 2003.

(2) As specified in §63.9(b), if you start up your new or reconstructed affected source on or after the effective date of this subpart, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(3) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.9290(c), your notification should include the information in §63.9(b)(2)(i) through (v) and a statement that your new or reconstructed engine test cell/stand has no additional requirements and explain the basis of the exclusion (for example, that the test cell/stand is used exclusively for testing internal combustion engines with rated power of less than 25 hp (19 kW)).

(c) If you are required to comply with the emission limitations in Table 1 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For each initial compliance demonstration with the emission limitation, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(d) You must submit a notification of initial performance evaluation of your CEMS or performance testing of your control device at least 60 calendar days before the performance testing/evaluation is scheduled to begin as required in §63.8(e)(2).

§63.9350 What reports must I submit and when?

(a) If you own or operate a new or reconstructed affected source that must meet the emission limitation, you must submit a semiannual compliance report according to Table 6 to this subpart by the applicable dates specified in paragraphs (a)(1) through (6) of this section, unless the Administrator has approved a different schedule.

(1) The first semiannual compliance report must cover the period beginning on the compliance date specified in §63.9295 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date specified in §63.9295.

(2) The first semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified in §63.9295.

(3) Each subsequent semiannual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each new or reconstructed engine test cell/stand that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established the date for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.

(6) If you had an SSM of a control device or associated monitoring equipment during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in paragraphs §63.10(d)(5)(i).

(b) If there is no deviation from the applicable emission limitation and the CEMS or CPMS was not out-of-control, according to §63.8(c)(7), the semiannual compliance report must contain the information described in paragraphs (b)(1) through (4) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) A statement that no deviation from the emission limit occurred during the reporting period and that no CEMS or CPMS was out-of-control, according to §63.8(c)(7).

(c) For each deviation from an emission limit, the semiannual compliance report must include the information in paragraphs (b)(1) through (3) of this section and the information included in paragraphs (c)(1) through (4) of this section.

(1) The date and time that each deviation started and stopped.

(2) The total operating time of each new or reconstructed engine test cell/stand during the reporting period.

(3) A summary of the total duration of the deviation during the reporting period (recorded in 4-hour periods), and the total duration as a percent of the total operating time during that reporting period.

(4) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(d) For each CEMS or CPMS deviation, the semiannual compliance report must include the information in paragraphs (b)(1) through (3) of this section and the information included in paragraphs (d)(1) through (10) of this section.

(1) The date and time that each CEMS or CPMS was inoperative except for zero (low-level) and high-level checks.

(2) The date and time that each CEMS or CPMS was out-of-control including the information in §63.8(c)(8).

(3) A summary of the total duration of CEMS or CPMS downtime during the reporting period (reported in 4-hour periods), and the total duration of CEMS or CPMS downtime as a percent of the total engine test cell/stand operating time during that reporting period.

(4) A breakdown of the total duration of CEMS or CPMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes and other unknown causes.

(5) The monitoring equipment manufacturer(s) and model number(s) of each monitor.

(6) The date of the latest CEMS or CPMS certification or audit.

(7) The date and time period of each deviation from an operating limit in Table 2 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of SSM or during another period.

(8) A summary of the total duration of each deviation from an operating limit in Table 2 to this subpart, each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.

(9) A breakdown of the total duration of the deviations from the operating limits in Table 2 to this subpart and bypasses of the add-on control device during the semiannual reporting period by identifying deviations due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(10) A description of any changes in CEMS, CPMS, or controls since the last reporting period.

(e) If you had an SSM of a control device or associated monitoring equipment during the semiannual reporting period that was not consistent with your SSMP, you must submit an immediate SSM report according to the requirements in §63.10(d)(5)(ii).

§63.9355 What records must I keep?

(a) You must keep the records as described in paragraphs (a)(1) through (5) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) Records of performance evaluations as required in §63.10(b)(2)(viii).

(3) Records of the occurrence and duration of each malfunction of the air pollution control equipment, if applicable, as required in §63.10(b)(2)(ii).

(4) Records of all maintenance on the air pollution control equipment, if applicable, as required in §63.10(b)(iii).

(5) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices.

(b) For each CPMS, you must keep the records as described in paragraphs (b)(1) through (7) of this section.

(1) For each deviation, a record of whether the deviation occurred during a period of SSM of the control device and associated monitoring equipment.

(2) The records in §63.6(e)(3)(iii) through (v) related to SSM.

(3) The records required to show continuous compliance with each operating limit specified in Table 2 to this subpart that applies to you.

(4) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in §63.9322(a).

(5) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§63.9321 and 63.9322(b) through (e), including the records specified in paragraphs (b)(5)(i) and (ii) of this section that apply to you.

(i) Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure. Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or C of appendix M to 40 CFR part 51 at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(ii) Records for an alternative protocol. Records needed to document a capture efficiency determination using an alternative method or protocol as specified in §63.9322(e), if applicable.

(6) The records specified in paragraphs (b)(6)(i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in §63.9323.

(i) Records of each add-on control device performance test conducted according to §§63.9321, 63.9322, and 63.9323.

(ii) Records of the engine testing conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.

(7) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in §63.9324 and to document compliance with the operating limits as specified in Table 2 to this subpart.

(c) For each CEMS, you must keep the records as described in paragraphs (c)(1) through (4) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superceded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Request for alternatives to the relative accuracy test for CEMS as required in §63.8(f)(6)(i), if applicable.

(4) The records in §63.6(e)(3)(iii) through (v) related to SSM of the control device and associated monitoring equipment.

(d) You must keep the records required in Table 5 to this subpart to show continuous compliance with each emission limitation that applies to you.

§63.9360 In what form and how long must I keep my records?

(a) You must maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each records for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must retain your records of the most recent 2 years on site, or your records must be accessible on site. Your records of the remaining 3 years may be retained off site.

Other Requirements and Information

§63.9365 What parts of the General Provisions apply to me?

Table 7 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§63.9370 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are described in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the emission limitations in §63.9300 under §63.6(g).

(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§63.9375 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA; in 40 CFR 63.2, and in this section:

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Public Law 101-549, 104 Statute 2399).

Area source means any stationary source of HAP that is not a major source as defined in this part.

Combustion turbine engine means a device in which air is compressed in a compressor, enters a combustion chamber, and is compressed further by the combustion of fuel injected into the combustion chamber. The hot compressed combustion gases then expand over a series of curved vanes or blades arranged on a central spindle that rotates.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitations;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

Engine means any internal combustion engine, any combustion turbine engine, or any rocket engine.

Engine Test Cell/Stand means any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) engines.

Hazardous Air Pollutant (HAP) means any air pollutant listed in or pursuant to section 112(b) of the CAA.

Internal combustion engine means a device in which air enters a combustion chamber, is mixed with fuel, compressed in the chamber, and combusted. Fuel may enter the combustion chamber with the air or be injected into the combustion chamber. Expansion of the hot combustion gases in the chamber rotates a shaft, either through a reciprocating or rotary action. For purposes of this subpart, this definition does not include combustion turbine engines.

Major source, as used in this subpart, shall have the same meaning as in §63.2.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Rated power means the maximum power output of an engine in use.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Responsible official means responsible official as defined by 40 CFR 70.2.

Rocket engine means a device consisting of a combustion chamber in which materials referred to as propellants, which provide both the fuel and the oxygen for combustion, are burned. Combustion gases escape through a nozzle, providing thrust.

Uninstalled engine means an engine not installed in, or an integrated part of, the final product.

[68 FR 28785, May 27, 2003, as amended at 71 FR 20470, Apr. 20, 2006]

Table 1 to Subpart PPPPP of Part 63—Emission Limitations

You must comply with the emission limits that apply to your affected source in the following table as required by §63.9300.

For each new or reconstructed affected source located at a major source facility that	You must meet one of the following emission

is used in whole or in part for testing . . .	**limitations:**
1. internal combustion engines with rated power of 25 hp (19 kW) or more	a. limit the concentration of CO or THC to 20 ppmvd or less (corrected to 15 percent O_2 content); or b. achieve a reduction in CO or THC of 96 percent or more between the inlet and outlet concentrations (corrected to 15 percent O_2 content) of the emission control device.

Table 2 to Subpart PPPPP of Part 63—Operating Limits

If you are required to comply with operating limits in §63.9302, you must comply with the applicable operating limits in the following table:

For the following device . . .	**You must meet the following operating limit . . .**	**and you must demonstrate continuous compliance with the operating limit by . . .**
1. Thermal oxidizer	a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.9324(a)	i. Collecting the combustion temperature data according to §63.9306(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above the temperature limit.
2. Catalytic oxidizer	a. The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to §63.9324(b)	i. Collecting the temperature data according to §63.9306(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature before the catalyst bed at or above the temperature limit.
	b. Either ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to §63.9324(b)(2) or develop and implement an inspection and maintenance plan according to §63.9324(b)(3) and (4)	i. Either collecting the temperature data according to §63.9306(c), reducing the data to 3-hour block averages, and maintaining the 3-hour average temperature difference at or above the temperature difference limit; or ii. Complying with the inspection and maintenance plan developed according to §63.9324(b)(3) and (4).

3. Emission capture system that is a PTE according to §63.9322(a)	a. The direction of the air flow at all times must be into the enclosure; and either	i. Collecting the direction of air flow; and either the facial velocity of air through all natural draft openings according to §63.9306(d)(1) or the pressure drop across the enclosure according to §63.9306(d)(2); and ii. Maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times.
	b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or	Follow the requirements in 3ai and ii of this table.
	c. The pressure drop across the enclosure must be at least 0.007 inch H_2O, as established in Method 204 of appendix M to 40 CFR part 51	Follow the requirements in 3ai and ii of this table.
4. Emission capture system that is not a PTE according to §63.9322(a)	a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according §63.9306(d)	i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to §63.9306(d); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit.

Table 3 to Subpart PPPPP of Part 63—Requirements for Initial Compliance Demonstrations

As stated in §63.9321, you must demonstrate initial compliance with each emission limitation that applies to you according to the following table:

For each new or reconstructed affected source complying with . . .	You must . . .	Using . . .	According to the following requirements . . .
1. The CO or THC outlet concentration emission limitation	a. Demonstrate CO or THC emissions are 20 ppmvd or less	i. EPA Methods 3A and 10 of appendix A to 40 CFR part 60 for CO measurement or EPA Method 25A of appendix A to 40 CFR part 60 for THC measurement; or	You must demonstrate that the outlet concentration of CO or THC emissions from the test cell/stand or emission control device is 20 ppmvd or less, corrected to 15 percent O_2 content, using the first 4-hour rolling average after a successful performance evaluation.
		ii. A CEMS for CO or THC and O_2 at the outlet of the engine test cell/stand or emission control device	This demonstration is conducted immediately following a successful performance evaluation of the CEMS as required in §63.9320(b). The demonstration consists of the first 4-hour rolling average of measurements. The CO or THC concentration must be corrected to 15 percent O_2 content, dry basis using Equation 1 in §63.9320.
2. The CO or THC percent reduction emission limitation	a. Demonstrate a reduction in CO or THC of 96 percent or more	i. You must conduct an initial performance test to determine the capture and control efficiencies of the equipment and to establish operating limits to be achieved on a continuous basis; or	You must demonstrate that the reduction in CO or THC emissions is at least 96 percent using the first 4-hour rolling average after a successful performance evaluation. Your inlet and outlet measurements must be on a dry basis and corrected to 15 percent O_2 content.
		ii. A CEMS for CO or THC and O_2 at both the inlet and outlet of the emission control device	This demonstration is conducted immediately following a successful performance evaluation of the CEMS as required in §63.9320(b). The demonstration consists of the first 4-hour rolling average of measurements. The inlet and outlet CO or THC concentrations must be corrected to 15 percent O_2 content using Equation 1 in

			§63.9320. The reduction in CO or THC is calculated using Equation 2 in §63.9320.

Table 4 to Subpart PPPPP of Part 63—Initial Compliance With Emission Limitations

As stated in §63.9330, you must demonstrate initial compliance with each emission limitation that applies to you according to the following table:

For the . . .	You have demonstrated initial compliance if . . .
1. CO or THC concentration emission limitation	The first 4-hour rolling average CO or THC concentration is 20 ppmvd or less, corrected to 15 percent O_2 content.
2. CO or THC percent reduction emission limitation	The first 4-hour rolling average reduction in CO or THC is 96 percent or more, dry basis, corrected to 15 percent O_2 content.

Table 5 to Subpart PPPPP of Part 63—Continuous Compliance With Emission Limitations

As stated in §63.9340, you must demonstrate continuous compliance with each emission limitation that applies to you according to the following table:

For the . . .	You must . . .	By . . .
1. CO or THC concentration emission limitation	a. Demonstrate CO or THC emissions are 20 ppmvd or less over each 4-hour rolling averaging period	i. Collecting the CPMS data according to §63.9306(a), reducing the measurements to 1-hour averages; or ii. Collecting the CEMS data according to §63.9307(a), reducing the measurements to 1-hour averages, correcting them to 15 percent O_2 content, dry basis, according to §63.9320;
2. CO or THC percent reduction emission limitation	a. Demonstrate a reduction in CO or THC of 96 percent or more over each 4-hour rolling averaging period	i. Collecting the CPMS data according to §63.9306(a), reducing the measurements to 1-hour averages; or ii. Collecting the CEMS data according to §63.9307(b), reducing the measurements to 1-hour averages, correcting them to 15 percent O_2 content, dry basis, calculating the CO or THC percent reduction according to §63.9320.

Table 6 to Subpart PPPPP of Part 63—Requirements for Reports

As stated in §63.9350, you must submit each report that applies to you according to the following table:

If you own or operate a new or reconstructed affected source that must comply with emission limitations, you must submit a . . .	**The report must contain . . .**	**You must submit the report . . .**
1. Compliance report	a. If there are no deviations from the emission limitations that apply to you, a statement that there were no deviations from the emission limitations during the reporting period	Semiannually, according to the requirements in §63.9350.
	b. If there were no periods during which the CEMS or CPMS were out of control as specified in §63.8(c)(7), a statement that there were no periods during which the CEMS or CPMS was out of control during the reporting period	Semiannually, according to the requirements in §63.9350.
	c. If you have a deviation from any emission limitation during the reporting period, the report must contain the information in §63.9350(c)	Semiannually, according to the requirements in §63.9350.
	d. If there were periods during which the CEMS or CPMS were out of control, as specified in §63.8(c)(7), that report must contain the information in §63.9350(d)	Semiannually, according to the requirements in §63.9350.
	e. If you had an SSM of a control device or associated monitoring equipment during the reporting period, the report must include the information in §63.10(d)(5)(i)	Semiannually, according to the requirements in §63.9350.

Table 7 to Subpart PPPPP of Part 63—Applicability of General Provisions to Subpart PPPPP

As stated in 63.9365, you must comply with the General Provisions in §§63.1 through 63.15 that apply to you according to the following table:

Citation	**Subject**	**Brief description**	**Applies to subpart PPPPP**
§63.1(a)(1)	Applicability	General applicability of the General Provisions	Yes. Additional terms defined in §63.9375.

Citation	Subject	Brief description	Applies to subpart PPPPP
§63.1(a)(2)-(4)	Applicability	Applicability of source categories	Yes.
§63.1(a)(5)	[Reserved]		
§63.1(a)(6)-(7)	Applicability	Contact for source category information; extension of compliance through early reduction	Yes.
§63.1(a)(8)	Applicability	Establishment of State rules or programs	No. Refers to State programs.
§63.1(a)(9)	[Reserved]		
§63.1(a)(10)-(14)	Applicability	Explanation of time periods, postmark deadlines	Yes.
§63.1(b)(1)	Applicability	Initial applicability	Yes. Subpart PPPPP clarifies applicability at §63.9285.
§63.1(b)(2)	Applicability	Title V operating permit-reference to part 70	Yes. All major affected sources are required to obtain a Title V permit.
§63.1(b)(3)	Applicability	Record of applicability determination	Yes.
§63.1(c)(1)	Applicability	Applicability after standards are set	Yes. Subpart PPPPP clarifies the applicability of each paragraph of subpart A to sources subject to subpart PPPPP.
§63.1(c)(2)	Applicability	Title V permit requirement for area sources	No. Area sources are not subject to subpart PPPPP.

Citation	Subject	Brief description	Applies to subpart PPPPP
§63.1(c)(3)	[Reserved]		
§63.1(c)(4)	Applicability	Extension of compliance for existing sources	No. Existing sources are not covered by the substantive control requirements of subpart PPPPP.
§63.1(c)(5)	Applicability	Notification requirements for an area source becoming a major source	Yes.
§63.1(d)	[Reserved]		
§63.1(e)	Applicability	Applicability of permit program before a relevant standard has been set	Yes.
§63.2	Definitions	Definitions for Part 63 standards	Yes. Additional definitions are specified in §63.9375.
§63.3	Units and Abbreviations	Units and abbreviations for Part 63 standards	Yes.
§63.4	Prohibited Activities	Prohibited activities; compliance date; circumvention, severability	Yes.
§63.5(a)	Construction/Reconstruction	Construction and reconstruction—applicability	Yes.
§63.5(b)(1)	Construction/Reconstruction	Requirements upon construction or reconstruction	Yes.
§63.5(b)(2)	[Reserved].		
§63.5(b)(3)	Construction/Reconstruction	Approval of construction	Yes.
§63.5(b)(4)	Construction/Reconstruction	Notification of construction	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
§63.5(b)(5)	Construction/Reconstruction	Compliance	Yes.
§63.5(b)(6)	Construction/Reconstruction	Addition of equipment	Yes.
§63.5(c)	[Reserved]		
§63.5(d)	Construction/Reconstruction	Application for construction reconstruction	Yes.
§63.5(e)	Construction/Reconstruction	Approval of construction or reconstruction	Yes.
§63.5(f)	Construction/Reconstruction	Approval of construction or reconstruction based on prior State review	Yes.
§63.6(a)	Applicability	Applicability of standards and monitoring requirements	Yes.
§63.6(b)(1)-(2)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for 112(f)	Yes.
§63.6(b)(3)	Compliance Dates for New and Reconstructed Sources	Compliance dates for sources constructed or reconstructed before effective date	No. Compliance is required by startup or effective date.
§63.6(b)(4)	Compliance Dates for New and Reconstructed Sources	Compliance dates for sources also subject to §112(f) standards	Yes.
§63.6(b)(5)	Compliance Dates for New and Reconstructed Sources	Notification	Yes.
§63.6(b)(6)	[Reserved].		
§63.6(b)(7)	Compliance Dates for New and	Compliance dates for new and reconstructed area sources	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
	Reconstructed Sources	that become major	
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Effective date establishes compliance date	No. Existing sources are not covered by the substantive control requirements of subpart PPPPP.
§63.6(c)(3)-(4)	[Reserved].		
§63.6(c)(5)	Compliance Dates for Existing Sources	Compliance dates for existing area sources that becomes major	Yes. If the area source become a major source by addition or reconstruction, the added or reconstructed portion will be subject to subpart PPPPP.
§63.6(d)	[Reserved].		
§63.6(e)(1)-(2)	Operation and Maintenance Requirements	Operation and maintenance	Yes. Except that you are not required to have an SSMP for control devices and associated monitoring equipment.
§63.6(e)(3)	SSMP	1. Requirement for SSM and SSMP 2. Content of SSMP.	Yes. You must develop an SSMP for each control device and associated monitoring equipment.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM of control devices or associated monitoring equipment	Yes, but you must comply with emission standards at all times except during SSM of control devices and associated monitoring equipment only.
§63.6(f)(2)-(3)	Methods for Determining	Compliance based on performance test, operation	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
	Compliance	and maintenance plans, records, inspection	
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)	Opacity/Visible Emission (VE) Standards	Requirements for opacity/VE standards	No. Subpart PPPPP does not establish opacity/VE standards and does not require continuous opacity monitoring systems (COMS).
§63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	No. Compliance extension provisions apply to existing sources, which do not have emission limitations in subpart PPPPP.
§63.6(j)	Presidential Compliance Exemption	President may exempt source category from requirement to comply with rule	Yes.
§63.7(a)(1)-(2)	Performance Test Dates	Dates for conducting initial performance testing and other compliance demonstrations: Must conduct within 180 days after first subject to rule	Yes.
§63.7(a)(3)	Section 114 Authority	Administrator may require a performance test under CAA Section 114 at any time	Yes.
§63.7(b)(1)	Notification Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Rescheduling	If have to reschedule performance test, must notify Administrator 5 days before	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
		schedule date of rescheduled date	
§63.7(c)	Quality Assurance/Test Plan	1. Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with	Yes.
		2. Test plan approval procedures	Yes.
		3. Performance audit requirements	Yes.
		4. Internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM; not a violation to exceed standard during SSM	Yes.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to rule and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	1. Must have three test runs of at least 1 hour each	Yes.
		2. Compliance is based on arithmetic mean of three runs	Yes.
		3. Conditions when data from an additional test run can be	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
		used	
§63.7(e)(4)	Other Performance Testing	Administrator may require other testing under section 114 of the CAA	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method	Yes.
§63.7(g)	Performance Test Data Analysis	1. Must include raw data in performance test report	Yes.
		2. Must submit performance test data 60 days after end of test with the Notification of Compliance Status	Yes.
		3. Keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes. Subpart PPPPP contains specific requirements for monitoring at §63.9325.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring with Flares	Unless your rule says otherwise, the requirements for flares in 63.11 apply	No. Subpart PPPPP does not have monitoring requirements for flares.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
		Administrator approves alternative	
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	1. Specific requirements for installing monitoring systems	Yes.
		2. Must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise	Yes.
		3. If more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	Yes.
§63.8(c)(1)(i)	Routine and predictable CMS malfunctions	1. Keep parts for routine repairs of CMS readily available 2. Reporting requirements for SSM when action is described in SSMP	Yes.
		3. Reporting requirements for SSM when action is described in SSMP	Yes.
§63.8(c)(1)(ii)	SSM of CMS Not in SSMP	Reporting requirements for SSM of CMS when action is not described in SSMP	Yes.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	1. How Administrator determines if source complying with operation and maintenance requirements	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
		2. Review of source O&M procedures, records, manufacturer's instructions and recommendations, and inspection	
§63.8(c)(2)-(3)	Monitoring System Installation	1. Must install to get representative emission of parameter measurements	Yes.
		2. Must verify operational status before or at performance test	Yes.
§63.8(c)(4)	Continuous Monitoring System (CMS) Requirements	1. CMS must be operating except during breakdown, out of control, repair, maintenance, and high-level calibration drifts	No. Follow specific requirements in §63.9335(a) and (b) of subpart PPPPP.
		2. COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period	No. Follow specific requirements in §63.9335(a) and (b) of subpart PPPP.
		3. CEMS must have a minimum of one cycle of operation for each successive 15-minute period	No. Follow specific requirements in §63.9335(a) and (b) of subpart PPPPP.
§63.8(c)(5)	COMS Minimum Procedures	COMS minimum procedures	No. Subpart PPPPP does not have opacity/VE standards.
§63.8(c)(6)-(8)	CMS Requirements	Zero and high-level calibration check requirements, out-of-control periods	Yes. Except that PPPP does not require COMS.

Citation	Subject	Brief description	Applies to subpart PPPPP
§63.8(d)	CMS Quality Control	1. Requirements for CMS quality control, including calibration, etc	Yes.
		2. Must keep quality control plan on record for 5 years. Keep old versions for 5 years after revisions	Yes.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	Yes. Except for §63.8(e)(5)(ii), which applies to COMS.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for CEMS	Yes.
§63.8(g)	Data Reduction	1. COMS 6-minute averages calculated over at least 36 evenly spaced data points 2. CEMS 1-hour averages computed over at least 4 equally spaced data points	Yes. Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §63.9340.
§63.8(g)(5)	Data Reduction	Data that cannot be used in computing averages for CEMS and COMS	No. Specific language is located at §63.9335(a).
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b)(1)-(5)	Initial Notifications	1. Submit notification subject 120 days after effective date	Yes.
		2. Notification of intent to construct/ reconstruct; notification of commencement	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
		of construct/ reconstruct; notification of startup	
		3. Contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed BACT/LAER	No. Compliance extensions do not apply to new or reconstructed sources.
§63.9(d)	Notification of Special Compliance Requirements for New Source	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	No. Subpart PPPPP does not require performance testing.
§63.9(f)	Notification of Opacity/VE Test	Notify Administrator 30 days prior	No. Subpart PPPPP does not have opacity/VE standards.
§63.9(g)(1)	Additional Notifications when Using CMS	Notification of performance evaluation	Yes.
§63.9(g)(2)	Additional Notifications when Using CMS	Notification of use of COMS data	No. Subpart PPPPP does not contain opacity or VE standards.
§63.9(g)(3)	Additional Notifications when Using CMS	Notification that exceeded criterion for relative accuracy	Yes. If alternative is in use.
§63.9(h)(1)-(6)	Notification of Compliance Status	1. Contents	Yes.
		2. Due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
		are due 30 days after	
		3. When to submit to Federal vs. State authority	Yes.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	1. Applies to all, unless compliance extension	Yes.
		2. When to submit to Federal vs. State authority	Yes.
		3. Procedures for owners of more than one source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	1. General requirements	Yes.
		2. Keep all records readily available	Yes.
		3. Keep for 5 years	Yes.
§63.10(b)(2)(i)-(v)	Records Related to SSM	1. Occurrence of each of operation (process equipment)	Yes.
		2. Occurrence of each malfunction of air pollution equipment	Yes.
		3. Maintenance on air pollution control equipment	Yes.
		4. Actions during SSM	Yes.

Citation	Subject	Brief description	Applies to subpart PPPPP
		5. All information necessary to demonstrate conformance with the SSMP	Yes.
§63.10(b)(2)(vi)-(xi)	CMS Records	Malfunctions, inoperative, out of control	Yes.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting initial notification and notification of compliance status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)(1)-(6), (9)-(15)	Records	Additional records for CEMS	Yes.
§63.10(c)(7)-(8)	Records	Records of excess emissions and parameter monitoring exceedances for CMS	No. Specific language is located at §63.9355 of subpart PPPPP.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No. Subpart PPPPP does not have opacity/VE standards.

Citation	Subject	Brief description	Applies to subpart PPPPP
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	No. Compliance extensions do not apply to new or reconstructed sources.
§63.10(d)(5)	SSM Reports	Contents and submission	Yes.
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Additional CMS reports	Yes.
§63.10(e)(2)(ii)	Additional CMS Reports	COMS-related report	No. Subpart PPPPP does not require COMS.
§63.10(e)(3)	Additional CMS Reports	Excess emissions and parameter exceedances reports	No. Specific language is located in §63.9350 of subpart PPPPP.
§63.10(e)(4)	Additional CMS Reports	Reporting COMS data	No. Subpart PPPPP does not require COMS.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11	Control Device Requirements	Requirements for flares	No. Subpart PPPPP does not specify use of flares for compliance.
§63.12	State Authority and Delegations	State authority to enforce standards	Yes.
§63.13	Addresses of State Air Pollution Control Offices and EPA Regional Offices	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes. ASTM D 6522-00 and ANSI/ASME PTC 19.10-1981 (incorporated by reference-See §63.14).

Citation	**Subject**	**Brief description**	**Applies to subpart PPPPP**
§63.15	Availability of Information and Confidentiality	Public and confidential information	Yes.

[68 FR 28785, May 27, 2003, as amended at 71 FR 20470, Apr. 20, 2006]

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a for a PSD/Significant Source Modification and a Part 70 Renewal

Source Description and Location

Source Name:	Subaru of Indiana Automotive, Inc.
Source Location:	5500 State Road 38 East, Lafayette, Indiana 47905
County:	Tippecanoe
SIC Code:	3711
PSD/Significant Source Modification No.:	157-36379-00050
Part 70 Renewal No.:	T157-36402-00050
Permit Reviewer:	Aida DeGuzman

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application and source modification application from Subaru of Indiana Automotive, Inc. relating to the operation automotive and sport utility vehicle assembly plant and modification to the plant. On October 21, 2015 Subaru of Indiana Automotive, Inc. submitted applications to the OAQ requesting to renew its operating permit and make changes to the plant. Subaru of Indiana Automotive, Inc. was issued its first Part 70 Operating Permit Renewal T157-27048-00050 on August 1, 2011.

Existing Approvals

The source was issued its first Part 70 Operating Permit Renewal No. 157-27048-00050 on August 1, 2011. The source has since received the following approvals:

(a) Prevention of Significant Deterioration/Significant Source Modification PSD/SSM No. 157-31885-00050, issued on October 4, 2012;

(b) Significant Permit Modification No. 157-31887-00050, issued on October 24, 2012;

(c) Significant Permit Modification No. 157-33106-00050, issued on July 16, 2013;

(d) Prevention of Significant Deterioration/Significant Source Modification PSD/SSM No. 157-33759-00050, issued on May 19, 2014;

(e) Significant Permit Modification No. 157-33836-00050, issued on June 6, 2014.

(f) Prevention of Significant Deterioration/Significant Source Modification PSD/SSM No. 157-34774-00050, issued on December 23, 2014; and

(g) Significant Permit Modification No. 157-34915-00050, issued on January 23, 2015.

County Attainment Status

The source is located in Tippecanoe County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual PM2.5 standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM2.5 standard.

Pollutant	Designation
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.	

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Tippecanoe County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Tippecanoe County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Tippecanoe County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD).

Existing Permitted Emission Units and Pollution Control Equipment

Paint Coating Line Systems A/B:

(a) Electrodeposition Coating of Vehicle Bodies (ED Coating Line), identified as Unit 001, with a capacity of 71 units per hour, constructed in 1989 and modified in 2009 and-2010. Approved in 2012 for modification to increase vehicle holding/storage area to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) ED Body Pretreatment area;

(2) One (1) ED Pretreatment Drying Oven, with one (1) insignificant natural gas indirect fired burner with a heat input capacity of 6.0 MMBtu/hr;

(3) One (1) insignificant boiler for paint temperature control, with a heat input capacity of 4.0 MMBtu/hr;

(4) Six (6) insignificant pretreatment boilers for warming water surrounding the ED Body Coating Tank, with a total heat input capacity of 9.0 MMBtu/hr;

(5) One (1) ED Body Coating Tank, utilizing dipping as the method of application;

(6) One (1) ED Body Oven (pretreatment drying oven) rated at 6.0 MMBtu/hr, with five (5) natural gas-fired burners (oven zones #1 through #5) each is rated at 2.5 MMBtu/hr, using a 2.5 MMBtu/hr natural gas-fired catalytic oxidizer (B-ED) as VOC control, and exhausting to one (1) stack, identified as B-ED Inc. (emissions from the entrance to, and exit from, the ED Body Oven use no controls and exhaust to one (1) stack, identified as B-ED Hood Exhaust);

(7) One (1) ED Body Cool Down area; and

(8) One (1) paint storage room.

(b) Sealing and PVC Undercoating Line, identified as Unit 002, with a capacity of 77 units per hour, constructed in 1989 and approved for modification in 2012, consisting of the following units:

(1) One (1) PVC Coating Booth #1, constructed in 1989, utilizing airless spray application system and pedestal robotic spray system, using a dry filter as particulate matter control, approved in 2012 for modification to add four (4) additional spray coating application systems, and exhausting to one (1) stack, identified as PVC-1-2;

(2) One (1) PVC Coating Booth #1 Preheat (oven zone #1), constructed in 1989, with one (1) natural gas indirect fired burner with a heat input capacity of 3.5 MMBtu/hr;

(3) One (1) PVC Coating Booth #2, constructed in 1999 and modified in 2006, utilizing the airless spray method of application, using a dry filter as particulate control, approved in 2012 for modification to add two (2) additional spray coating application systems and exhausting to one (1) stack, identified as PVC-Booth 2;

(4) One (1) PVC Coating Booth #2 Preheat (oven zone #2), constructed in 1999, with one (1) natural gas direct fired burner with a heat capacity of 16.8 MMBtu/hr;

(5) One (1) PVC Seal Oven, constructed in 1989, with two (2) insignificant natural gas-fired burners totaling 6.94 MMBtu/hr, using no controls, and exhausting to one (1) stack, identified as PVC-Oven Exhaust;

(6) One (1) PVC Cool Down area, constructed in 1989, using no controls, and exhausting to one (1) stack, identified as PVC Cooling; and

(7) One (1) Sound Deadener Operation approved in 2010 for construction, using no controls.

(c) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, and modified in 2006, 2009 and 2010, consisting of the following units:

(1) One (1) Topcoat #1 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, and automatic spray applicators, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of 5 MMBtu/hr;

(2) One (1) Topcoat #1 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/h and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(3) One (1) Topcoat #1 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(4) One (1) Topcoat #1 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to

one (1) stack, identified as TC-1 Inc. (emissions from the entrance to and exit from the Topcoat #1 Oven are not controlled and exhaust to one (1) stack, identified as TC-1 Ex.). The oven is equipped with a purge exhaust stack;

(5) One (1) Topcoat #1 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-1 O.Cl.;

(6) One (1) Topcoat #2 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to ten (10) stacks, identified as TC2-1 through TC2-10. One (1) natural gas-fired dry off oven between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr;

(7) One (1) Topcoat #2 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/hr and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(8) One (1) Topcoat #2 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(9) One (1) Topcoat #2 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-2 Inc. (emissions from the entrance to and exit from the Topcoat #1 Oven are not controlled and exhaust to one (1) stack, identified as TC-2 Ex.). The oven is equipped with a purge exhaust stack;

(10) One (1) Topcoat #2 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-2;

(11) One (1) Topcoat #3 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to five (5) stacks, identified as TUT-1 through TUT-5;

(12) One (1) Topcoat #3 Booth Preheat, with two (2) natural gas-fired burners (oven zones #1 and #2), one (1) with a heat input capacity of 1.5 MMBtu/hr and one (1) with a heat input capacity of 2.5 MMBtu/hr;

(13) One (1) Topcoat #3 Booth Reheat, with one (1) insignificant 1.5 MMBtu/hr natural gas-fired burner (oven zone #3);

(14) One (1) Topcoat #3 Booth Oven, approved in 2013 for modification, with four (4) insignificant natural gas-fired burners with a total maximum heat input capacity of 8.55 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2. The oven is equipped with a purge exhaust stack;

(15) One (1) Topcoat #3 Booth Cool Down area;

(16) One (1) Topcoat #3 Booth natural gas indirect fired flash zone heater between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr, permitted in 2010 for construction; and

(17) Main paint mix room.

(d) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to include alterations to the conveyor system that will add storage capacity to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) Intermediate Working Stage burner (oven zone #1), with a heat input capacity of 2.5 MMBtu/hr;

(2) One (1) Intermediate Coating Booth, utilizing, two (2) robots, for the application of anti-chip (ACC) and stone guard (SGC), two (2) manual air assisted spray guns for the application of primer on inner doors for certain colors, followed by the exterior robot e-stat painting process, using a water wash as particulate control, and exhausting to six (6) stacks, identified as SUR-2 through SUR-7;

(3) One (1) Intermediate Booth Preheat (oven zones #2 and #3), with two (2) natural gas-fired burners, each with a heat input capacity of 2.5 MMBtu/hr;

(4) One (1) Intermediate Booth Reheat burner (oven zone #4), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(5) One (1) Intermediate Coating Oven, with five (5) insignificant natural gas direct fired burners totaling 12.42 MMBtu/hr, using a 1.0 MMBtu/hr natural gas-fired catalytic incinerator (SUR) as VOC control, and exhausting to one (1) stack, identified as SUR-1 (emissions from the entrance to and exit from the Intermediate Coating Oven use no controls and exhaust to one (1) stack, identified as Surfacer Hood Exhaust);

(6) One (1) Intermediate Cool Down area, using no controls, and exhausting to one (1) stack, identified as Surfacer Cooling; and

(7) Main paint mix room.

(e) Plastic Bumper Coating Line (PBL), identified as Unit 005, with a capacity of 60 units per hour, constructed in 1989 and modified in 2010, consisting of the following units:

(1) One (1) PBL Paint Booth, utilizing the air atomization and electrostatic bell methods of spraying, using a water wash as particulate matter control, and exhausting to four (4) stacks, identified as BPR-1, BPR-2, BPR-JR, and BPR-AP;

(2) One (1) PBL Booth Preheat (oven zone #1), with one (1) natural gas-fired burner with a heat input capacity of 1.5 MMBtu/hr;

(3) One (1) PBL Booth Reheat (oven zone #2), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(4) One (1) PBL Oven (ASH preheat), using a 17.1 MMBtu/hr natural gas-fired thermal incinerator as VOC control, and exhausting to one (1) stack, identified as BPR Inc.;

(5) One (1) PBL Cool Down area;

(6) Two (2) PBL natural gas-fired flash zone heaters for the primer and basecoat zones, each with a heat input capacity of 2.5 MMBtu/hr and exhausting to two (2) separate stacks, permitted in 2010 for construction; and

(7) One (1) paint mixing room.

(f) Anticorrosion Coating, identified as Unit 006, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to add two (2) spray coating systems at the Black Coat and Wax Booth to allow more vehicles coated hourly, including the following equipment:

(1) One (1) Black Coat and Wax Booth, utilizing the air atomized and air-assisted airless methods of spraying, using a dry filter as particulate matter control, exhausting to BCW Stack;

(2) One (1) Black and Wax Coat natural gas direct fired burner, with a heat input capacity of 24.0 MMBtu/hr;

(3) One (1) Anticorrosion Coating Booth, utilizing the air-assisted method of spraying, using a dry filter as particulate control, exhausting to Anticorrosion Stack; and

(4) One (1) insignificant Anticorrosion Coating natural gas-fired burner.

Approved in 2014 for physical modification and operational change as part of the proposed "2014 Increase in Capacity Project" for the plastic bumper coating operations. This will involve conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for Subaru vehicles with an increase in capacity from 110,000 to 250,000 vehicles per year. The converted paint line will be renamed Unit 005B.

Use of existing Unit 005 will continue also having a capacity of 250,000 units per year.

(g) One (1) plastic fascia paint line system currently identified as PFPLS#2, to be renamed as Unit 005B, once production of non-Subaru vehicle ceases, which coats front and rear bumpers, and left and right side molding panels, with a maximum capacity of 150,118 units per year, constructed in 2006, and consisting of the following units:

(1) One (1) primer spray zone in the PFPLS#2 booth, now identified as Unit 005B, currently utilizing air atomized spray with robot method of application and automatic spray applicators with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack , identified as PB2(a). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(2) One (1) basecoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(b). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(3) One (1) clearcoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(c). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(4) Two (2) paint flash off areas for the primer zone and basecoat zone, exhausting to stack PB2(d), which includes natural gas-fired dry off ovens, with a total heat input capacity of 1.1 MMBtu/hr;

(5) Three (3) natural gas direct fired air intake units, each with a heat input capacity of 3.1 million British thermal units per hour (MMBtu/hr);

(6) One (1) fascia paint line, now Unit 005B natural gas-fired curing oven, with a heat input capacity of 2.5 MMBtu/hr, controlled by a catalytic/thermal oxidizer with a heat input capacity of 1.1 MMBtu/hr, exhausting to one (1) stack, identified as PB2(g). Approved in 2014 to increase oven length. Upon conversion to Subaru vehicles, the catalytic/thermal oxidizer will be removed from service.

(7) One (1) paint mix room.

(8) One (1) Natural gas-fired burner with a heat input capacity of 3 MMBtu/hr approved in 2014 for construction.

(9) Six (6) back-up manual spray applicators approved in 2014 for construction.

(h) Final Repair (Touchup) painting, identified as Unit 007, constructed in 1989 and approved in 2014 to increase capacity from 10 units per hour to 15 units per hour including the following::

(1) One (1) Touchup IPC Booth, located in the In-Process Control area, utilizing the air atomization method of spraying;

(i) Trim Line, identified as Unit 010, application in the Body Shop and Trim Shop of adhesives and sealers to various vehicle parts, constructed in 1989 and approved in 2012 for modification which includes increasing the line speed to allow more vehicles to be coated on an hourly basis and approved in 2014 for modification in order to accommodate a production increase from 310,000 vehicles per year to 450,000 vehicles per year:

(1) One (1) Trim Wax application line.

(2) One (1) startup and roll test operation.

(3) Robotic applicators, permitted in 2016 for construction in the window installation area of Trim Line B, Unit 010 to allow for a new quarter glass side window for a new vehicle model.

(4) Approved in 2016 to include chemical compound trans-1,3,3,3-tetrafluoropropene in the air conditioning refrigerant for use in vehicles assembled on Trim Lines A and B.

(j) Six (6) storage tanks, identified collectively as Unit 011, approved in 2014 to increase utilization to accommodate the increase in production capacity from 310,000 vehicles per year to 450,000 vehicles per year, which includes the following equipment:

(1) Gasoline storage tank, with a capacity of 15,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(2) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(3) Waste purge thinner storage tank, with a capacity of 6,000 gallons, constructed in 1992;

(4) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 2005;

(5) Windshield washer fluid storage tank, with a capacity of 5,000 gallons, constructed in 1988; and

(6) Gasoline storage tank, with a capacity of 1,500 gallons, installed in 2004.

(k) Purge Solvent usage and capture system, identified as Unit 012, constructed in 1989 and modified in 2006 and 2010 to allow for purging and capturing of solvent and waterborne purge materials.

Paint Coating Line System C, with a maximum capacity of 160,000 vehicles per year, approved in 2014 for construction, dedicated in coating of the increase in vehicle production, consisting of the following units:

(a) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through 13-9 consisting of the following units:

(1) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, with a maximum heat input capacity of 12 million British thermal units per hour (MMBtu/hr).

(2) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(3) One (1) ED Oven (pretreatment drying oven), with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(4) One (1) ED Body Cool Down Area.

(5) One (1) ED Deck and ED Sand Area.

(6) One (1) Paint Storage Room.

(7) One (1) Working Stage Air House to support the Sealer, PVC, ED Sand, Wet Sand #2 Area rated at 9.5 MMBtu/hr.

(8) One (1) Working Stage Air House to support the Surfacer Sand, Wet Sand #1 Area rated at 2.6 MMBtu/hr.

(b) Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Line, identified as Unit 014, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 3 exhaust stacks, identified as Stacks 14-1 through 14-3, consisting of the following:

(1) One (1) PVC Coating Booth #1, equipped with airless spray application and pedestal robotic spray system, using a dry filter to control the particulate overspray emissions.

(2) One (1) PVC Sealer Oven, with a maximum heat input capacity of 3.0 MMBtu/hr, using no control.

(3) One (1) PVC Cool Down Area, using no controls.

(4) One (1) Sealer Application Area, using no controls.

(5) One (1) LASD (Liquid Applied Sound Deadener) Application Area, using no controls.

(c) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(1) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Intermediate Coating Oven, with a maximum heat input capacity of 10 MMBtu/hr, with no VOC control.

(3) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at 3.0 MMBtu/hr.

(4) One (1) Intermediate (Surfacer) Air House rated at 21.6 MMBtu/hr.

(5) One (1) Intermediate Cool Down Area, using no controls.

(6) One (1) main paint mix room.

(d) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-1 through 16-26, consisting of the following:

(1) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of 8.0 MMBtu/hr, using a 1.0 MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control.

(3) One (1) Topcoat natural gas-fired flash zone heater rated at 3.0 MMBtu/hr.

(4) One (1) Topcoat #C1 Cool Down Area, using no controls.

(5) One (1) main paint mix room.

(6) One (1) Topcoat Air House rated at 38 MMBtu/hr.

(7) One (1) Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

(e) Anticorrosion Coating Operations , identified as Unit 017, with a capacity of 160,000 (if built as part of new paint Line C) or 225,000 units per year (if built as part of existing paint lines “A/B”), approved in 2014 for construction, venting to 2 exhaust stacks, identified as Stacks 17-1 through 17-2**,** consisting of the following units:

(1) One (1) Black and Wax Coating Booth, to be part of either the new paint line C or existing paint lines “A/B”, equipped with air atomized and air-assisted airless spray systems, using a dry filter to control the particulate overspray emissions.

(2) One (1) Black and Wax Coating Booth natural gas-fired burner, with a maximum heat input capacity of 15.5 MMBtu/hr.

(3) One (1) Wax Coating Booth, constructed in 2014 in the Trim & Final Assembly Area, utilizing air-assisted spray system, with no particulate overspray control.

(f) Plastic Bumper Coating Line (PBL-C), identified as Unit 018, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 18 exhaust stacks, identified as Stacks 18-1 through 18-18, consisting of the following units (see operating scenarios for Unit 005B):

(1) One (1) PBL-C Paint Booth, equipped with air atomization and electrostatic bell spray systems, using dry filtration or water wash system to control the particulate overspray emissions.

(2) One (1) PBL-C Oven, with a maximum heat input capacity of 3.0 MMBtu/hr, using no VOC controls.

(3) One (1) PBL-C Cool Down area.

(4) One (1) paint mixing room.

(5) Three (3) Bumper Air Houses (includes Primer Air House, basecoat Air house and Clearcoat Air House), rated at a total of 17.7 MMBtu/hr.

(6) One (1) PBL-C natural gas-fired flash zone heater located between the primer and basecoat zones rated at 3.0 MMBtu/hr.

(7) One (1) PBL-C natural gas-fired flash zone heater located between the basecoat and the clearcoat zones rated at 3.0 MMBtu/hr.

(8) One (1) Working Stage Air House rated at 4.4 MMBtu/hr.

(9) One (1) Mixing Air House located in Mixing Room rated at 1.8 MMBtu/hr.

(g) Miscellaneous combustion devices, approved in 2014 for construction:

(1) One (1) Working Stage Air House used to support the Inspection, Touch-up area rated at 6.5 MMBtu/hr.

(2) One (1) Working Stage Air House used to support Paint Coating Line C rated at 2.4 MMBtu/hr.

(h) Purge solvent usage and capture system, identified as Unit 019, approved in 2014 for construction, designed to allow for purging and capturing of solvent and waterborne purge materials.

(i) Miscellaneous support cleaning operations, identified as Unit 020, approved in 2014 for construction, which include wiping solvent and miscellaneous cleanup materials.

(j) An additional Startup and Roll Test Line, approved in 2014 for construction.

(k) Engine assembly - one (1) additional dynamometer gasoline engine testing, where engines are tested prior to installation in the vehicle chassis, approved in 2014 for construction.

Insignificant Activities:

(a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(1) Six (6) general hot water boilers with a combined heat input capacity of 19.6 MMBtu/hr. [40 CFR 52.21] [326 IAC 2-2] [326 IAC 6-2-4]

(2) Other insignificant natural gas combustion units: [326 IAC 2-2]

(A) Stamping Shop Steam Cleaner

(B) Distillation Room Heater

(C) Makeup Air Units (7)

(D) Unit Heaters (50)

(E) Door Heaters (14)

(F) Air Handling Units (48)

(G) Heating and Ventilation Units (6)

(3) Other insignificant natural gas combustion units approved in 2014 for construction: [326 IAC 2-2]

Rooftop Units - 53 Units
- Engine Assembly Expansion - 4 Units (1.6 MMBtu/hr total)
- Engine Warehouse Expansion - 2 Units (0.8 MMBtu/hr total)
- Trim Warehouse Phase 1 - 5 Units (2.0 MMBtu/hr total)
- Trim Warehouse Phase 2 - 5 Units (2.0 MMBtu/hr total)
- Trim Warehouse Phase 3 - 5 Units (2.0 MMBtu/hr total)
- Body Warehouse - 3 Units (1.2 MMBtu/hr total)
- Body Service Warehouse - 3 Units (1.2 MMBtu/hr total)
- Stamping Warehouse 1 - 4 Units (1.6 MMBtu/hr total)
- Stamping Warehouse 2 - 1 Unit (0.4 MMBtu/hr total)
- Motor Pool Bldg. - 3 Units (1.2 MMBtu/hr total)
- Paint Coating Line C Heating and Cooling Units - 11 units (8.8 MMBtu/hr total)
- Paint Coating Line C Makeup Air Heating Units - 5 units (7.5 MMBtu/hr total)
- Paint Coating Line C Air Handling Units - 2 units (7.7 MMBtu/hr total)

Heater Units - 39 Units
- Engine Assembly Expansion - 1 Unit (0.4 MMBtu/hr total)
- Engine Warehouse Expansion - 4 Units (1.6 MMBtu/hr total)
- Trim Warehouse Phase 1 - 2 Units (0.8 MMBtu/hr total)
- Trim Warehouse Phase 2 - 2 Units (0.8 MMBtu/hr total)
- Trim Warehouse Phase 3 - 2 Units (0.8 MMBtu/hr total)
- Body Warehouse - 3 Units (1.20 MMBtu/hr total)
- Body Service Warehouse - 2 Units (0.8 MMBtu/hr total)
- Stamping Warehouse 1 - 3 Units (1.2 MMBtu/hr total)
- Stamping Warehouse 2 - 1 Unit (0.4 MMBtu/hr total)
- Motor Pool Accessary Bldg - 2 Units (0.8 MMBtu/hr total)
- Paint Coating Line C Heater Units - 17 units (6.8 MMBtu/hr total)

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 2-2]

(1) One (1) Stamping Shop; and

(2) Two (2) body lines within one (1) Body Shop with MIG and resistance welding robots, and one grinding booth, constructed in 1989 and approved for modification in 2012 and 2014 to expand the Body Shop Building to include a Parts Storage Area and Body Shop Processing Area including the following:

(i) One (1) natural gas-fired air supply unit, with a maximum heat input capacity of 1.73 million British thermal units per hour (MMBtu/hr).

(ii) MIG welding operations, with a maximum welding rod usage of 96,105 pounds per year.

(iii) One (1) bumper injection machine approved in 2014 for installation within the existing building, required for the capacity increase to 450,000 vehicles per year.

(c) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(d) Deburring; buffing; polishing; abrasive blasting activities; pneumatic conveying; and woodworking operations. [326 IAC 6-3-2]

(e) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(1) Gasoline Fill Operations (Benzene, Naphthalene, Ethylbenzene, Styrene, Toluene, Hexane, Xylene, Methyl Tert-butyl Ether) [326 IAC 2-2]

(2) The following storage tanks permitted under OP 79-09-93-0454, issued on July 26, 1989:

(A) One (1) double-walled fixed-roof engine oil storage tank, with a capacity of 5,000 gallons; and

(B) One (1) double-walled fixed-roof power steering fluid storage tank, with a capacity of 5,000 gallons;

(3) The following activities permitted under E 157-14535-00050, issued on October 10, 2001: assembly and testing (including engine test stands);

(4) Manual solvent wipedown.

(5) One (1) power steering fluid storage tank, with a capacity of 5,000 gallons, installed in 1988.

(6) One (1) transmission oil storage tank, with a capacity of 5,000 gallons, installed in 1988.

(7) One (1) Antifreeze storage tank, with a capacity of 10,000 gallons, installed in 1988.

(8) One (1) Antifreeze storage tank, with a capacity of 12,000 gallons, installed in 1988.

Emission Units and Pollution Control Equipment Removed From the Source

The source has removed the following emission units:

(a) One (1) Wet Sand Repair direct fired Dryoff Oven, with one (1) insignificant natural gas-fired burner with a heat input capacity of 1.49 MMBtu/hr;

(b) Plastic Bumper Coating Line (PBL-C), identified as Unit 018, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 18 exhaust stacks, identified as Stacks 18-1 through 18-18, consisting of the following units (see operating scenarios for Unit 005B):

(1) One (1) PBL-C Paint Booth, equipped with air atomization and electrostatic bell spray systems, using dry filtration or water wash system to control the particulate overspray emissions.

(2) One (1) PBL-C Oven, with a maximum heat input capacity of 3.0 MMBtu/hr, using no VOC controls.

(3) One (1) PBL-C Cool Down area.

(4) One (1) paint mixing room.

(5) Three (3) Bumper Air Houses (includes Primer Air House, basecoat Air house and Clearcoat Air House), rated at a total of 17.7 MMBtu/hr.

(6) One (1) PBL-C natural gas-fired flash zone heater located between the primer and basecoat zones rated at 3.0 MMBtu/hr.

(7) One (1) PBL-C natural gas-fired flash zone heater located between the basecoat and the clearcoat zones rated at 3.0 MMBtu/hr.

(8) One (1) Working Stage Air House rated at 4.4 MMBtu/hr.

(9) One (1) Mixing Air House located in Mixing Room rated at 1.8 MMBtu/hr.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	>250
PM_{10}	>250
SO_2	<100
VOC	>250
CO	>100 but <250
NO_x	>100 but <250
Single HAP	>10
Total HAP	>25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10, VOC, CO and NOx are each equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Fugitive Emissions

This type of operation (automotive and light-duty trucks assembly plant) is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-7; however, there is an

applicable New Source Performance Standard (Subpart MM) that was in effect on August 7, 1980. Therefore, fugitive emissions are counted toward the determination of PSD and Part 70 Permit applicability.

Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions Limit for Coating Lines A/B** (ton/yr)	**Emissions Limit for Paint Line System C** (ton/yr)	**TOTAL Limited Emissions** (tons/yr)
PM	23.1 (D.1.1(b))	<25	<48
PM_{10}	23.1 (D.1.1(b)), [1a]	<15	<38.1
$PM_{2.5}$	23.1[1]	<10	<33.1
SO_2	<40 (D1.2)	0.20	<40.20
NO_X	92[2]	39.7 (D.9.1(c)	131.7
VOC	1,084.5 (D.1.3)	766.2 (D.9.1)[5]	1,850.7
CO	99.8[2]	37.4[3]	137.2
GHGs as CO_2e	>100,000 [4]	44,018[6]	>100,000
HAPs			
Single HAP	>10		
Combined HAPs	>25		

[1] $PM_{2.5}$ regulation had not been promulgated at the time of the initial PSD permit (79) 1651 issuance on July 30, 1987. Although PM2.5 is not limited, it is assumed equal to PM and PM10.

[1a] PM_{10} regulation was promulgated on July 31, 1987 and took effect on August 5, 1987 which is after the issuance of the initial PSD permit (79) 1651 issuance on July 30, 1987. Therefore, PM_{10} was not limited at that time. However, subsequent CP 157-9619-00050 was issued in 1999 that allowed for the increase in production from 240,000 to 262,000 vehicles/year. This CP 157-9619-00050 did not require a limit for PM_{10}, since the modification was naturally below 15 tons/yr. However, upon issuance of the initial TV Permit 157-5906-00050 in 2004, PM_{10} was a regulated pollutant. During this initial TV permitting process, Subaru commented (which was documented as Comment 7 on page 10 of 137 of the ATSD of the initial TV permit) to add a source-wide general Section D.1 to include a PM_{10} emissions limit and other emission limits to avoid repetition throughout other D sections of the permit. Therefore, PM_{10} was limited to 23.1 tons/year, assuming PM_{10} emissions were equivalent to PM emissions from units present and permitted in PSD permit (79) 1651 in 1987.

[2] In the initial construction permit PSD (79) 1651, issued on July 30, 1987, the source was subject to PSD BACT requirements for NOx emissions, while the potential to emit CO was 39 tons/yr, which is less than 100 tons/year significant level. Various PSD BACT limits have been established including a natural gas usage limit of 2,752 million cubic feet per year (MMCF/yr), which corresponds to NOx emissions of 92 tons/year, using AP-42 emission factors in place in 1987. This limit was adjusted in TV 157-5906-00050 to 2,380 MMCF/yr as explained in its Technical Support Document on Page 11 of 35, due to the revisions of AP-42 emission factors upon issuance of TV 157-5906-00050.

In PSD/SSM 157-34774-00050, issued on December 23, 2014, IDEM determined that the natural gas fuel usage limit of 2,380 MMCF/yr, using a current AP-42 emission factor of 84 lb/MMCF, corresponds to 100 tons/year instead of less than 100 tons/yr. Therefore, this limit was adjusted to 2,375 MMCF/yr which corresponds to 99.8 tons/yr of CO.

[3] Naturally minor and no controls employed.

(4) Based on a natural gas usage limit of 2,375 MMCF/yr.

(5)The VOC limit of 768.8 tons/yr in D.9.1 for the Paint Line System C was adjusted to 766.2 tons/yr to match the PSD BACT limit established in the BACT Analysis.

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, excluding GHGs, is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) The source-wide GHG emissions are equal to or greater than one hundred thousand (>100,000) tons of CO_2 equivalent (CO_2e) emissions per year. GHG emissions do not affect the source PSD status.

(c) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification - PSD Units

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Subaru of Indiana Automotive, Inc. on October 13, 2015, October 21, 2015 and November 2, 2015 relating to the proposed addition of new combustion emission units instead of the combustion emission units originally permitted in PSD/SSM 157- 33759-00050, issued on May 19, 2014 and PSD/SSM 157-34774-00050, issued on December 23, 2014. A re-evaluation of the PSD BACT for VOC is required for those combustion units that have increased heat input ratings and for those units that are considered new.

The following are the proposed changes to the natural gas combustion units associated with Paint Line C or related portions of the expansion project approved under the PSD/SSM permits referenced above:

(a) Installation of one (1) ED natural gas-fired boiler comprised of six (6) units with a maximum heat input rate of 1.3 MMBtu/hr each and a total maximum heat input rate of 7.8 MMBtu/hr. instead of the permitted 12 MMBtu/hour boiler used for warming water surrounding the ED Coating Tank.

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(b) Installation of one (1) 3.5 MMBtu/hour heat input PVC Sealer Oven instead of the 3.0 MMBtu/hour oven.

(c) Installation of one (1) 10.1 MMBtu/hour heat input Intermediate (Surfacer) Oven instead of the 10.0 MMBtu/hour oven.

(d) Installation of one (1) 2.5 MMBtu/hour heat input Intermediate (Surfacer) flash zone heater instead of the permitted 3.0 MMBtu/hour heater.

(e) Installation of one (1) 2.5 MMBtu/hour heat input Topcoat flash zone heater instead of the permitted 3.0 MMBtu/hour heater.

(f) Installation of one (1) 7.6 MMBtu/hour heat input Topcoat #C1 Oven instead of the permitted 8.0 MMBtu/hour oven.

(g) Installation of one (1) 0.99 MMBtu/hour heat input Topcoat Oven Regenerative Thermal Oxidizer (RTO) instead of the permitted 1.0 MMBtu/hour oven.

(h) Installation of one (1) 26.5 MMBtu/hour heat input Intermediate (Surfacer) Air House instead of the permitted 21.6 MMBtu/hour Air House.

(i) Installation of one (1) 42 MMBtu/hour heat input Topcoat Air House instead of the permitted 38.0 MMBtu/hour Air House.

(j) Installation of one (1) 11.0 MMBtu/hour heat input Working Stage Air House #1 - Prep Deck, Offline Area instead of the permitted 9.5 MMBtu/hour Air House.

(k) Installation of one (1) 13.7 MMBtu/hour heat input Black Coat and Wax Booth instead of the permitted 15.5 MMBtu/hour Air House.

(l) Proposed one (1) spray booth boiler comprised of six (6) units with a maximum heat input rate of 1.25 MMBtu/hr each and a total maximum heat input rate of 7.5 MMBtu/hr.

(m) Installation of one (1) 11 MMBtu/hour heat input Working Stage Air House #2 - Inspection, Touchup Area instead of the permitted 6.5 MMBtu/hour Air House.

(n) Installation of six (6) 0.8337 MMBtu/hour Pretreatment Roof Heating and Cooling Units identified as HCU-14-1 through HCU-14-6 instead of the permitted six (6) 0.77 MMBtu/hour each heating units.

(o) Installation of one (1) 0.8 MMBtu/hour Rooftop Unit - Heating and Cooling identified as HCU-11 Oven Roof instead the 0.591 MMBtu/hour heating unit.

(p) Installation of one (1) 0.8 MMBtu/hour Rooftop Unit - Heating and Cooling identified as HCU-12 Cafeteria instead the 0.692 MMBtu/hour heating unit.

(q) Installation of one (1) 0.4 MMBtu/hour Rooftop Unit - Heating and Cooling identified as HCU-13- Roof of Conveyor Bridge instead the 1.175 MMBtu/hour heating unit.

(r) Installation of one (1) 0.4 MMBtu/hour Rooftop Unit - Heating and Cooling identified as HCU-14-Roof of Conveyor Bridge instead the 1.175 MMBtu/hour heating unit.

(s) Installation of three (3) 1.62 MMBtu/hour Rooftop Unit -Makeup Air Units identified as MAU-14-1 through MAU-14-3 Roof Oven Area instead of the permitted three (3) 1.5 MMBtu/hour each makeup air units.

(t) Installation of two (2) 1.62 MMBtu/hour each Rooftop Unit -Makeup Air Units identified as MAU-14-4 Roof Wastewater and MAU-14-5 Roof Paint Sludge instead of the permitted two (2) 1.5 MMBtu/hour each makeup air units.

(u) Installation of two (2) 4.167 MMBtu/hour each Rooftop Unit - Air Handling Units identified as AHU-14-1 and AHU-14-2 Penthouse instead of the permitted two (2) 3.834 MMBtu/hour each air handling units.

(v) Proposed new one (1) 4.8 MMBtu/hour heat input natural gas-fired emergency generator.

Proposed Modification Not Related to PSD Project

The Office of Air Quality (OAQ) has likewise, reviewed a modification application, submitted by Subaru of Indiana Automotive, Inc. on October 13, 2015 and November 2, 2015 relating to changes to the plant to accommodate the production of a new vehicle model, that are not related to the Paint Line System C that went through PSD review.

(a) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

(b) Robotic applicators, permitted in 2016 for construction in the window installation area of Trim Line B, Unit 010 to allow for a new quarter glass side window for a new vehicle model.

(c) Approved in 2016 to include chemical compound trans-1,3,3,3-tetrafluoropropene in the air conditioning refrigerant for use in vehicles assembled on Trim Lines A and B.

(d) Approved in 2016 for modification of the spray application system at Topcoat #1 (Emission Unit 003) painting operation. The automatic air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application will be replaced with automated electrostatic bell type spray applicators.

Enforcement Issues

There are no pending enforcement actions.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

New Combustion Units - PSD Project

PTE Before Controls	
Pollutant	**Potential To Emit** (ton/yr)
PM	1.39
PM_{10}	5.63
$PM_{2.5}$	5.63
SO_2	0.44
VOC	4.07
CO	62.23
NO_X	74.08
Single HAPs	1.33
Total HAPs	1.44

Exempt Units Not Related to the PSD Project

PTE Before Controls of New Units	
Pollutant	**Potential To Emit** (ton/yr)
PM	0.01
PM_{10}	0.01
$PM_{2.5}$	0.01
SO_2	0.00
VOC	6.07
CO	1.42
NO_X	0.12
Single HAPs	0.00
Total HAPs	0.00

PTE Change of the Modified Process			
Pollutant	**PTE Before Modification** (ton/yr)	**PTE After Modification** (ton/yr)	**Increase from Modification** (ton/yr)
PM	0.341	0.385	0.044
PM_{10}	0.341	0.385	0.044
$PM_{2.5}$	0.341	0.385	0.044
SO_2	--	--	--
VOC	139.70	142.45	2.75
CO	--	--	--
NO_X	--	--	--
HAPs	0.00	0.00	0.00

Total PTE Increase due to the Modification Not Related to the PSD Project			
Pollutant	**PTE New Emission Units** (ton/yr)	**Net Increase to PTE of Modified Emission Units** (ton/yr)	**Total PTE for New and Modified Units** (ton/yr)
PM	0.01	0.044	0.06
PM_{10}	0.01	0.044	0.06
$PM_{2.5}$	0.01	0.044	0.06
SO_2	--	--	--
VOC	6.07	2.75	8.82
CO	1.42	--	1.42
NO_X	0.12	--	0.12
HAPs	0.00	0.00	0.00

Note: The proposed new combustion units (called PSD Units) in this permitting action PSD/SSM157-36379-00050) are being aggregated with the PSD Project Paint Line C, originally permitted in PSD/SSM 157-33759-00050 and PSD/SSM 157-34774-00050 since they are part of that project, while the proposed new engine test benches, new robotic applicator for window installation, and changes to Topcoat #1 paint applicators are separate projects not related to the PSD Units.

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

<u>Proposed new combustion units - PSD Units:</u>

(a) This source modification relating to the proposed new combustion units is subject to 326 IAC 2-7-10.5(g)(1), (4), since the modification is subject to 326 IAC 2-2, PSD. This source modification is being aggregated with the original PSD/SSM 157- 33759-00050, issued on May 19, 2014 and PSD/SSM 157-34774-00050, issued on December 23, 2014.

<u>Proposed new engine test benches, new robotic applicators for window installation, and changes to Topcoat #1 paint applicators</u>

These units that are not related to the PSD Project are exempt from construction permitting, pursuant to 326 IAC 2-7-10.5 because VOC, which is the main pollutant, is emitted below the minor source threshold level of 10 tons/year.

Proposed new combustion units - PSD Units:

(b) The source modification relating to the proposed new combustion units will be incorporated into the Part 70 Operating Permit through a Significant Permit Modification (SPM) issued pursuant to 326 IAC 2-7-12(d)(1) because it does not qualify as a minor permit modification or as an administrative amendment and it involves a case-by-case determination of PSD BACT emission limitations. The SPM will be incorporated through the Part 70 Operating Permit Renewal.

Proposed new engine test benches, new robotic applicator for window installation, and changes to Topcoat #1 paint applicators

These exempt units that are not related to the PSD Project are subject to Significant Permit Modification, under 326 IAC 2-7-12(d) since the four (4) engine test benches are subject to the provisions of 40 CFR Part 63, Subpart PPPPP under Title I of the Clean Air Act, which requires the addition of a new emission limit or standard, new record keeping and reporting.

The SPM will be incorporated through the Part 70 Operating Permit Renewal.

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 source modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

PSD Units LIMITED PTE (tons/year)							
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**NO_X**	**VOC**	**CO**
*New Natural Gas Combustion Units + Existing Unchanged Units Permitted in PSD/SSM 157-33759-00050	0.71	2.85	2.85	0.23	37.55	2.07	31.54
New Internal Combustion Emergency Generator	0.05	0.06	0.06	Negl.	0.70	0.35	1.40
Total Limited PTE for Modification	**0.76**	**2.91**	**2.91**	**0.23**	**38.25**	**2.42**	**32.94**
PSD Significant Thresholds	25	15	10	40	40	40	100

*$PM_{2.5}$ listed is direct $PM_{2.5}$.

Permit Level Determination – PSD -
Units Not Related to the PSD Project - Actual to Projected Actual (ATPA) Test

The Permittee has provided information as part of the application for this approval that based on Actual to Projected Actual test in 326 IAC 2-2-2(d)(3), this modification at a major stationary source will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1. IDEM, OAQ has not reviewed this information and will not be making any determination in this regard as part of this approval. The applicant will be required to keep records and report in accordance with Source obligation in 326 IAC 2-2-8.

ATPA - Modification Not Related to PSD Project							
Emission Unit/ID	**PM**	**PM10**	**PM2.5**	**VOC**	**CO**	**SO2**	**NOx**
PTE NEW EMISSION UNITS							
Engine Testing	0.01	0.01	0.01	0.13	1.41	0.00	0.12
Window Installation	0.0	0.0	0.0	5.94	0.0	0.00	0.0
TOTAL PTE FROM NEW UNITS	**0.01**	**0.01**	**0.01**	**6.07**	**1.41**	**0.00**	**0.12**
ACTUAL TO PROJECTED ACTUAL (ATPA) TEST - MODIFIED EMISSION UNITS							
BASELINE ACTUAL EMISSIONS							
Topcoat Line #1 Baseline Actual Emissions (tons/year)	0.25	0.25	0.25	109.04	0.00	0.00	0.00
PROJECTED ACTUAL EMISSIONS							
Topcoat #1 projected Actual Emissions (tons/year)	0.39	0.39	0.39	168.85	0.00	0.00	0.00
COULD HAVE ACCOMMODATED EMISSIONS							
Topcoat #1 Demand Growth	0.10	0.10	0.10	30.80	0.00	0.00	0.00
TOTAL EMISSION INCREASE FROM MODIFIED UNITS (ATPA)	**0.04**	**0.04**	**0.04**	**29.02**	**0.00**	**0.00**	**0.00**
TOTAL EMISSION INCREASE FROM PROJECT	**0.05**	**0.05**	**0.05**	**35.09**	**1.41**	**0.00**	**0.12**
PSD SIGNIFICANT LEVELS	**25**	**15**	**10**	**40**	**100**	**40**	**40**

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

Table PSD Units

(a) The project is the addition of new or upsized combustion units that are related to new Paint Line C and thus are being aggregated with the Coating Paint Line C, which is major under PSD for VOC. Paint Line C was permitted in PSD/SSM 157-33759-00050 and PSD/SSM 157-34774-00050. Therefore, this project is also PSD for VOC.

(b) The NOx emissions from the Coating Paint Line C were limited to less than 40 tons/year, which likewise, limited the external combustion units' fuel usage to 751 MMCF/yr. *The project in this permitting action will not change these limits which apply for both the proposed new external combustion emission units and existing external combustion emission units permitted in PSD/SSM 157-33759.-00050

Table - Modification Not Related to PSD Project - ATPA

Based on the ATPA analysis provided by the Permittee, this modification will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1. IDEM, OAQ has not reviewed this information and will not be making any determination in this regard as part of this approval. The applicant will be required to keep records and report in accordance with Source obligation in 326 IAC 2 2 8.

Federal Rule Applicability Determination - Proposed New PSD Units and Exempt Units

NSPS:

(a) 40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

(2) Owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006.

(3) The provisions of §60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand.

The following engines are subject to NSPS, Subpart JJJJ for spark ignition internal combustion engine constructed after January 1, 2009 with maximum engine power greater than 19 kW (25HP).

(1) One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (636 HP), permitted in 2016 for construction.

(2) One (1) 225 HP natural gas fired emergency engine, installed in 2010

The following sections of Subpart JJJJ are applicable to the emergency generators. Non-applicable portions of this NSPS will not be included in the permit:

(1) 40 CFR §60.4230(4)(iv)
(2) 40 CFR §60.4233(e)
(3) 40 CFR §60.4234
(4) 40 CFR §60.4243
(5) 40 CFR §60.4245

(b) 40 CFR Part 60, Subpart IIII - New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines

This rule applies to the following:

(1) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or
(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

The provisions of 40 CFR Part 60, Subpart IIII are not included for the following compression ignition engines because these engines commenced construction before July 11, 2005:

(1) One 180 HP emergency engine, installed in 1997.

(2) One 760 HP diesel fueled emergency engine, installed in 1989.

(3) Two 375 HP diesel fired emergency fire pumps, installed in 1987.

(c) 40 CFR Part 60, Subpart MM - Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations - This NSPS applies to each prime coat operation, each guide coat operation, and each topcoat operation in an automobile or light-duty truck assembly plant that begins construction, reconstruction, or modification after October 5, 1979.

(1) The modified Topcoat #1 will continue to be subject to NSPS, Subpart MM.

(2) The proposed window installation at Trim Line B, Unit 010 are not included among the operations subject to Subpart MM.

(d) There other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) determinations made for these emissions units will not be affected by this permitting action.

NESHAP:

(a) 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This subpart applies to any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

The following emergency engine is subject to Subpart ZZZZ for existing emergency compression ignition engines with site rating >500 HP which commenced construction before December 19, 2002, pursuant to 40 CFR Part 63.6590(a)(1)(i):

(1) One (1) 760 HP diesel fueled emergency engine, installed in 1989.

The following generators are subject to Subpart ZZZZ for existing emergency compression ignition engines with site rating ≤ 500 HP, which commenced construction before June 12, 2006, pursuant to 40 CFR Part 63.6590(a)(1)(ii).

(1) Two (2) 375 HP diesel fired emergency fire pumps, installed in 1987.
(2) One (1) 180 HP emergency engine, installed in 1997.

The following emergency generator is subject to Subpart ZZZZ for new stationary RICE with a site rating of >500 HP which commenced construction on or after December 19, 2002 pursuant to 40 CFR Part 63.6590(a)(2)(i):

(1) One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (636 HP), permitted in 2016 for construction.

Pursuant to 40 CFR § 63.6590(c)(4), the following emergency engine, which is a new emergency use stationary RICE with a site rating ≤500 brake HP located at a major source must meet the requirements of this part by meeting the requirements of 40 CFR part 60, Subpart JJJJ, for spark ignition engines. No further requirements apply to this engine under 40 CFR Part 63, Subpart ZZZZ, as stated in 40 CFR § 63.6590(c).

(1) One (1) 225 HP natural gas fired emergency engine, installed in 2010.

Non-applicable sections of the NESHAP will not be listed in the permit. The following sections of 40 CFR Part 63, Subpart ZZZZ shall apply to the following units:

One (1) 760 HP diesel fueled emergency engine, installed in 1989.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(1)(i)
(4) 40 CFR 63.6595(a)(1), (c) - Must comply with this subpart no later than June 15, 2007
(5) 40 CFR 63.6604(c)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625 (h), (i)
(8) 40 CFR 63.6640(f)(1),(2),(3)
(9) 40 CFR 63.6645(b) - submit initial notification not later than December 13, 2004 for unit with site rating >500 HP that started operation before the effective date of this subpart
(10) 40 CFR 63.6650
(11) 40 CFR 63.6655(a), (d), (e)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2b to Subpart ZZZZ of Part 63,
(18) Table 6 to Subpart ZZZZ of Part 63, item 13
(17) Table 8 to Subpart ZZZZ of Part 63

Two (2) 375 HP diesel fired emergency fire pumps, installed in 1987 and one (1) 180 HP emergency engine, installed in 1997.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)

(3) 40 CFR 63.6590(a)(1)(ii)
(4) 40 CFR 63.6595(a)(1), (c) -- Must comply with this subpart no later than May 3, 2013
(5) 40 CFR 63.6604(b)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625 (f), (i)
(8) 40 CFR 63.6640(a), (b), (f)(1),(2),(3)
(9) 40 CFR 63.6645(d) - submit initial notification not later than July 16, 2008 for unit with site rating ≤500 HP that started operation before the effective date of this subpart
(10) 40 CFR 63.6650
(11) 40 CFR 63.6655(a), (d), (e)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2c to Subpart ZZZZ of Part 63, item 1
(17) Table 6 to Subpart ZZZZ of Part 63, item 13
(18) Table 8 to Subpart ZZZZ of Part 63

One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (636 HP), permitted in 2016 for construction.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(2)(i)
(4) 40 CFR 63.6595(a)(3), (c)
(5) 40 CFR 63.6605
(6) 40 CFR 63.6625 (h), (j)
(7) 40 CFR 63.6640(f)(1),(2),(3)
(8) 40 CFR 63.6645((c) - submit initial notification not later than 120 days after becoming subject to this subpart.
(9) 40 CFR 63.6650
(10) 40 CFR 63.6655(a), (d)
(11) 40 CFR 63.6660
(12) 40 CFR 63.6665
(13) 40 CFR 63.6670
(14) 40 CFR 63.6675
(15 Table 1a to Subpart ZZZZ of Part 63
(16) Table 1b to Subpart ZZZZ of Part 63
(17) Table 7 to Subpart ZZZZ of Part 63; item 4.
(18) Table 8 to Subpart ZZZZ of Part 63

One (1) 225 HP natural gas fired emergency engine, installed in 2010.

(1) 40 CFR § 63.6590(c).

(b) The other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) determinations made for these emissions units will not be affected by this permitting action.

(c) 40 CFR Part 63, Subpart MMMM - National Emission Standard for Surface Coating of Miscellaneous Metal Parts and Products

This NESHAP applies to surface coating of miscellaneous metal parts or products that uses 250 gallons per year, or more of coating that contain hazardous air pollutants (HAP), and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. This NESHAP also applies to surface coating associated activities, such as surface preparation, cleaning, mixing and storage, curing and drying of the applied coatings.

(1) The modified Topcoat #1 will continue to satisfy NESHAP, Subpart MMMM by complying with NESHAP, Subpart IIII - National Emission Standard for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks.

(2) The proposed window installation at Trim Line B, Unit 010 is not included among the operations subject to Subpart MMMM.

(d) 40 CFR Part 63, Subpart PPPP - National Emission Standard for Surface Coating of Plastic Parts and Products. This NESHAP applies to surface coating of plastic parts and products, which includes but are not limited to plastic components of the following types of products as well as the products themselves: Motor vehicle parts and accessories for automobiles, trucks, recreational vehicles, sporting and recreational goods, toys, business machines, laboratory and medical equipment, and household and other consumer products. These also include surface coating associated activities, such as surface preparation, cleaning, curing/drying, mixing, and storage.

(1) The modified Topcoat #1 will continue to satisfy NESHAP, Subpart PPPP by complying with NESHAP, Subpart IIII - National Emission Standard for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks.

(2) The proposed window installation at Trim Line B, Unit 010 is subject to NESHAP, Subpart PPPP. The Trim Line is currently subject to Subpart PPPP. However, the source chose to comply with Part 63, Subpart IIII, in order to demonstrate compliance with 40 CFR Part 63, Subpart PPPP.

(e) 40 CFR Part 63, Subpart IIII - National Emission Standard for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks. This NESHAP applies to this source, which is an existing affected source, as defined in §63.3082, which applies topcoat to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks, and that is a major source. The affected source is the collection of operations that are used for surface coating of new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks:

(1) The modified Topcoat #1 will continue to be subject to NESHAP, Subpart IIII.

(2) The proposed window installation at Trim Line B, Unit 010 is subject to Subpart IIII. The Trim Line will continue to be subject to NESHAP, Subpart IIII.

(f) 40 CFR Part 63, Subpart PPPPP - National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands.

This NESHAP applies to engine test cells/stands used for testing uninstalled stationary or uninstalled mobile (motive) engines located at a major source of HAP emissions.

The proposed four (4) engine test benches are subject to the following portions of Subpart PPPPP and must comply with this subpart upon startup. Non-applicable portions have not been included in the permit:

(1) 40 CFR §63.9280
(2) 40 CFR §63.9285
(3) 40 CFR §63.9290
(4) 40 CFR §63.9295(a)(2)
(5) 40 CFR §63.9300
(6) 40 CFR §63.9301
(7) 40 CFR §63.9302
(8) 40 CFR §63.9305
(9) 40 CFR §63.9306
(10) 40 CFR §63.9307

(11) 40 CFR §63.9310
(12) 40 CFR §63.9320
(13) 40 CFR §63.9321
(14) 40 CFR §63.9330
(15) 40 CFR §63.9335
(16) 40 CFR §63.9340
(17) 40 CFR §63.9345
(18) 40 CFR §63.9350
(19) 40 CFR §63.9355
(20) 40 CFR §63.9360
(21) 40 CFR §63.9365
(22) 40 CFR §63.9370
(23) Table 1 to Subpart PPPPP of Part 63—Emission Limitations
(24) Table 3 to Subpart PPPPP of Part 63—Requirements for Initial Compliance Demonstrations
(25) Table 4 to Subpart PPPPP of Part 63—Initial Compliance With Emission Limitations
(26) Table 5 to Subpart PPPPP of Part 63—Continuous Compliance With Emission Limitations
(27) Table 6 to Subpart PPPPP of Part 63—Requirements for Reports

(g) 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

This rule applies to new, reconstructed and existing industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP, except as specified in §63.7491.

The following new emission units are subject to this Subpart DDDDD:

(1) One (1) ED natural gas-fired boiler comprised of six (6) units with a maximum heat input rate of 1.3 MMBtu/hr each and a total maximum heat input rate of 7.8 MMBtu/hr.

(2) One (1) spray booth natural gas-fired boiler comprised of six (6) units with a maximum heat input rate of 1.25 MMBtu/hr each and a total maximum heat input rate of 7.5 MMBtu/hr.

Non-applicable portions of Subpart DDDDD are not included for the above emission units: These emission units are subject to the following portions of Subpart DDDDD:

40 CFR § 63.7480
40 CFR § 63.7485
40 CFR § 63.7490(a)(2)
40 CFR § 63.7491
40 CFR § 63.7495(a)
40 CFR § 63.7499
40 CFR § 63.7500(a)(1),(f)
40 CFR § 63.7505(a)
40 CFR § 63.7510(g)
40 CFR § 63.7515(d)
40 CFR § 63.7540(a)(11)

40 CFR § 63.7545(a), (c)
40 CFR § 63.7550(c(1)(5)(i) through (iv), (xiv), (xvii)
40 CFR § 63.7555(a)(1)
40 CFR § 63.7560
40 CFR § 63.7565
40 CFR § 63.7570
40 CFR § 63.7575,
Table 3 to Subpart DDDDD of Part 63 (applicable section)
Table 9 to Subpart DDDDD of Part 63 (applicable section)
Table 10 to Subpart DDDDD of Part 63 (applicable section)

CAM:

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each new or modified pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit involved.

CAM Applicability Analysis							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
*Engine Testing	None	N	0.13 VOC	0.13	100	N	--
Window Installation	None	N	5.94VOC	5.94	100	N	--
**Existing Topcoat #1 Booth	None	Y			100	N	
***Natural Gas Combustion Units	None	Y	4.07 total VOC 74.08 total NOx	--	100	N	--

*All the other pollutants emitted by the proposed new engine test benches are at insignificant amounts. No other pollutants are emitted by the window installation operation.

**The existing Topcoat #1 Booth being modified in this permitting action will continue to be not subject to CAM requirements because its VOC emissions are not controlled.

***NOx is the main pollutant. The highest rate of NOx emitted by one unit is 18 tons NOx/year. Each combustion unit emits VOC at insignificant amounts.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are not applicable to the engine testing and window installation operations.

The affected natural gas combustion units in this permitting action are not subject to CAM because they are not equipped with a control device and each does not have the PTE at or above the major source threshold level.

Federal Rule Applicability Determination - Existing Permitted Units

NSPS:

(a) 40 CFR Part 60, Subpart E - Standards of Performance For Incinerators. This rule applies to incinerators that are used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible matter.
The incinerators (TC-1, TC-2, TUT, SUR, B-ED, PBL and PFPLS#2), are not subject to the requirements of 40 CFR Part 60, Subpart E (Standards of Performance for Incinerators) because these incinerators do not burn or combust solid waste as defined in 40 CFR 60.51(b).

(b) 326 IAC 12, and 40 CFR Part 60, Subpart MM - Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations - This NSPS applies to each prime coat operation, each guide coat operation, and each topcoat operation in an automobile or light-duty truck assembly plant that begins construction, reconstruction, or modification after October 5, 1979.

The ED Body Coating Tank (one of the facilities identified as Unit 001), the coating booths of the Topcoat System (identified as 003), and the Intermediate Coating Booth (one of the facilities identified as Unit 004) are subject to this NSPS, Subpart MM because these facilities perform prime coating, guide coating, and top coating of automobile and light-duty truck bodies at a source that was constructed after October 5, 1979.

Nonapplicable portions of the NSPS will not be included in the permit. The following requirements shall apply to the above emission units:

40 CFR Part 60.390
40 CFR Part 60.391
40 CFR Part 60.392
40 CFR Part 60.393
40 CFR Part 60.394
40 CFR Part 60.395
40 CFR Part 60.396
40 CFR Part 60.397

The Sealing and PVC Undercoating Line (identified as Unit 002), the Plastic Bumper Coating Line (identified as Unit 005), the Anticorrosion Coating operation (identified as Unit 006), the Plastic Fascia Paint Line System, identified as PFPLS#2 and the Final Repair operation (identified as Unit 007) are not subject to the requirements of Subpart MM because this NSPS apply only to prime coating, guide coating, and topcoating of light-duty trucks and automobile bodies and do not apply to coating of vehicle chassis or plastic body components

(c) 40 CFR Part 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units - This NSPS applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

The insignificant boilers are not subject to the requirements of this NSPS, Subpart Dc because they each have a maximum heat input capacity of less than ten (10) million Btu per hour (MMBtu/hr).

(d) 40 CFR 60, Subpart Kb - Standards for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels). This NSPS applies to each storage vessel with a capacity greater than or equal to 19,813 gallons (75 m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

The storage tanks identified as Unit 011 (15,000-gallon gasoline storage tank, 5,000-gallon purge thinner tank and 6,000-gallon waste purge thinner tank), and the insignificant 5,000 gallons engine oil and 5,000 gallon power steering fluid storage tanks are not subject to the requirements of this NSPS, Subpart Kb because none of these storage vessels have storage capacities greater than or equal to 19,813 gallons (75 m^3).

(e) 40 CFR Part 60, Subpart CCCC - Standards of Performance for Commercial and Industrial Solid Waste Incineration Units. This NSPS applies to commercial and Industrial solid waste incineration units for which construction is commenced after November 30, 1999 or for which modification or reconstruction is commenced on or after June 1, 2001.

The incinerators (TC-1, TC-2, TUT, SUR, B-ED, PBL and PFPLS#2), at the source are not subject to the requirements of this NSPS, Subpart CCCC because none of the incinerators are used to incinerate solid waste as defined in 40 CFR 60.2265.

NESHAP:

(a) 40 CFR Part 63.2330, Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)

This subpart applies to each new, reconstructed, or existing organic liquids distribution (OLD) operation affected source. The affected source is composed of:

(1) All storage tanks storing organic liquids.
(2) All transfer racks at which organic liquids are loaded into or unloaded out of transport vehicles and/or containers.
(3) All equipment leak components in organic liquids service that are associated with:

(A) Storage tanks storing organic liquids;
(B) Transfer racks loading or unloading organic liquids;
(C) Pipelines that transfer organic liquids directly between two storage tanks that are subject to this subpart;
(D) Pipelines that transfer organic liquids directly between a storage tank subject to this subpart and a transfer rack subject to this subpart; and
(E) Pipelines that transfer organic liquids directly between two transfer racks that are subject to this subpart.

(4) All transport vehicles while they are loading or unloading organic liquids at transfer racks subject to this subpart.
(5) All containers while they are loading or unloading organic liquids at transfer racks subject to this subpart.

The requirements of this NESHAP are included for the following emission units:

(1) Six (6) storage tanks, identified collectively as Unit 011, approved in 2014 to increase utilization to accommodate the increase in production capacity from 310,000 vehicles per year to 450,000 vehicles per year, which includes the following equipment:

(A) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(B) Waste purge thinner storage tank, with a capacity of 6,000 gallons, constructed in 1992;

(C) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 2005;

(D) Windshield washer fluid storage tank, with a capacity of 5,000 gallons, constructed in 1988.

(2) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 25 lb/day PM; 5 lb/hr or 25 lb/day SO2; 5 lb/hr or 25 lb/day NOx; 3 lb/hr or 15 lb/day VOC; 1.0 ton/yr of a single HAP, or 2.5 ton/yr of any combination of HAPs:

(A) One (1) power steering fluid storage tank, with a capacity of 5,000 gallons, installed in 1988.

(B) One (1) transmission oil storage tank, with a capacity of 5,000 gallons, installed in 1988.

(C) One (1) Antifreeze storage tank, with a capacity of 10,000 gallons, installed in 1988.

(D) One (1) Antifreeze storage tank, with a capacity of 12,000 gallons, installed in 1988

(b) 40 CFR Part 63, Subpart MMMM - National Emission Standard for Surface Coating of Miscellaneous Metal Parts and Products. This NESHAP applies to surface coating of miscellaneous metal parts or products that uses 250 gallons per year, or more of coating that contain hazardous air pollutants (HAP), and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. This NESHAP also applies to surface coating associated activities, such as surface preparation, cleaning, mixing and storage, curing and drying of the applied coatings.

The Permittee, which engages in surface coating of miscellaneous metal parts and products, has chosen to comply with the provisions of 40 CFR Part 63, Subpart IIII, in order to demonstrate compliance with 40 CFR Part 63, Subpart MMMM.

(c) 40 CFR Part 63, Subpart PPPP - National Emission Standard for Surface Coating of Plastic Parts and Products. This NESHAP applies to surface coating of plastic parts and products, which includes but are not limited to plastic components of the following types of products as well as the products themselves: Motor vehicle parts and accessories for automobiles, trucks, recreational vehicles, sporting and recreational goods, toys, business machines, laboratory and medical equipment, and household and other consumer products. These also include surface coating associated activities, such as surface preparation, cleaning, curing/drying, mixing, and storage.

The Permittee, which engages in surface coating of plastic parts and products, has chosen to comply with the provisions of 40 CFR Part 63, Subpart IIII, in order to demonstrate compliance with 40 CFR Part 63, Subpart PPPP.

(d) 40 CFR Part 63, Subpart IIII - National Emission Standard for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks. This NESHAP applies to this source, which is an existing affected source, as defined in §63.3082, which applies topcoat to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks, and that is a major source. The affected source is the collection of operations that are used for surface coating of new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks:
The following emission units are subject to Subpart IIII:

(1) Electrodeposition Coating of Vehicle Bodies (ED Coating Line), identified as Unit 001, with a capacity of 71 units per hour, constructed in 1989 and modified in 2009 and 2010. Approved in 2012 for modification to increase vehicle holding/storage area to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(A) One (1) ED Body Pretreatment area;

(B) One (1) ED Pretreatment Drying Oven, with one (1) insignificant natural gas indirect fired burner with a heat input capacity of 6.0 MMBtu/hr;

(C) One (1) insignificant boiler for paint temperature control, with a heat input capacity of 4.0 MMBtu/hr;

(D) Six (6) insignificant pretreatment boilers for warming water surrounding the ED Body Coating Tank, with a total heat input capacity of 9.0 MMBtu/hr;

(E) One (1) ED Body Coating Tank, utilizing dipping as the method of application;

(F) One (1) ED Body Oven (pretreatment drying oven) rated at 6.0 MMBtu/hr, with five (5) natural gas-fired burners (oven zones #1 through #5) each is rated at 2.5 MMBtu/hr, using a 2.5 MMBtu/hr natural gas-fired catalytic oxidizer (B-ED) as VOC control, and exhausting to one (1) stack, identified as B-ED Inc. (emissions from the entrance to, and exit from, the ED Body Oven use no controls and exhaust to one (1) stack, identified as B-ED Hood Exhaust);

(G) One (1) ED Body Cool Down area; and

(H) One (1) paint storage room.

(2) Sealing and PVC Undercoating Line, identified as Unit 002, with a capacity of 77 units per hour, constructed in 1989 and approved for modification in 2012, consisting of the following units:

(A) One (1) PVC Coating Booth #1, constructed in 1989, utilizing airless spray application system and pedestal robotic spray system, using a dry filter as particulate matter control, approved in 2012 for modification to add four (4) additional spray coating application systems, and exhausting to one (1) stack, identified as PVC-1-2;

(B) One (1) PVC Coating Booth #1 Preheat (oven zone #1), constructed in 1989, with one (1) natural gas indirect fired burner with a heat input capacity of 3.5 MMBtu/hr;

(C) One (1) PVC Coating Booth #2, constructed in 1999 and modified in 2006, utilizing the airless spray method of application, using a dry filter as particulate control, approved in 2012 for modification to add two (2) additional spray coating application systems and exhausting to one (1) stack, identified as PVC-Booth 2;

(D) One (1) PVC Coating Booth #2 Preheat (oven zone #2), constructed in 1999, with one (1) natural gas direct fired burner with a heat capacity of 3.5 MMBtu/hr;

(E) One (1) PVC Seal Oven, constructed in 1989, with two (2) insignificant natural gas-fired burners totaling 6.94 MMBtu/hr, using no controls, and exhausting to one (1) stack, identified as PVC-Oven Exhaust;

(F) One (1) PVC Cool Down area, constructed in 1989, using no controls, and exhausting to one (1) stack, identified as PVC Cooling; and

(G) One (1) Sound Deadener Operation approved in 2010 for construction, using no controls.

(3) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, and modified in 2006, 2008, 2009, and 2010 consisting of the following units:

(A) One (1) Topcoat #1 Booth, approved in 2016 to replace existing spray applicators with automated electrostatic bell type spray applicators, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of 2.5 MMBtu/hr.

(B) One (1) Topcoat #1 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/hr and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(C) One (1) Topcoat #1 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(D) One (1) Topcoat #1 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-1 Inc. (emissions from the entrance to and exit from the Topcoat #1 Oven are not controlled and exhaust to one (1) stack, identified as TC-1 Ex.). The oven is equipped with a purge exhaust stack;

(E) One (1) Topcoat #1 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-1 O.Cl.;

(F) One (1) Topcoat #2 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to ten (10) stacks, identified as TC2-1 through TC2-10. One (1) natural gas-fired dry off oven between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr;

(G) One (1) Topcoat #2 Booth Preheat, with three (3) natural gas-fired burners (oven zones #1, #2 and #3), one (1) with a heat input capacity of 3.5 MMBtu/hr and two (2) each with a heat input capacity of 2.5 MMBtu/hr;

(H) One (1) Topcoat #2 Booth Reheat, with three (3) insignificant natural gas direct fired burners;

(I) One (1) Topcoat #2 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural

gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-2 Inc. (emissions from the entrance to and exit from the Topcoat #1 Oven are not controlled and exhaust to one (1) stack, identified as TC-2 Ex.). The oven is equipped with a purge exhaust stack;

(J) One (1) Topcoat #2 Cool Down area, using no controls, and exhausting to one (1) stack, identified as TC-2;

(K) One (1) Topcoat #3 Booth, utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, using a water wash as particulate matter control, and exhausting to five (5) stacks, identified as TUT-1 through TUT-5;

(L) One (1) Topcoat #3 Booth Preheat, with two (2) natural gas-fired burners (oven zones #1 and #2), one (1) with a heat input capacity of 1.5 MMBtu/hr and one (1) with a heat input capacity of 2.5 MMBtu/hr;

(M) One (1) Topcoat #3 Booth Reheat, with one (1) insignificant 1.5 MMBtu/hr natural gas-fired burner (oven zone #3);

(N) One (1) Topcoat #3 Booth Oven, approved in 2013 for modification, with four (4) insignificant natural gas-fired burners with a total maximum heat input capacity of 8.55 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2. The oven is equipped with a purge exhaust stack;

(O) One (1) Topcoat #3 Booth Cool Down area;

(P) One (1) Topcoat #3 Booth natural gas indirect fired flash zone heater between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr, permitted in 2010 for construction; and

(Q) Main paint mix room.

(4) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010, Approved in 2012 for modification to include alterations to the conveyor system that will add storage capacity to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(A) One (1) Intermediate Working Stage burner (oven zone #1), with a heat input capacity of 2.5 MMBtu/hr;

(B) One (1) Intermediate Coating Booth, utilizing, two (2) robots for the application of anti-chip (ACC), two (2) manual air assisted spray guns for the application of primer on inner doors for certain colors, followed by the exterior robot e-stat painting process, using a water wash as particulate control, and exhausting to six (6) stacks, identified as SUR-2 through SUR-7;

(C) One (1) Intermediate Booth Preheat (oven zones #2 and #3), with two (2) natural gas-fired burners, each with a heat input capacity of 2.5 MMBtu/hr;

(D) One (1) Intermediate Booth Reheat burner (oven zone #4), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(E) One (1) Intermediate Coating Oven, with five (5) insignificant natural gas direct fired burners totaling 12.42 MMBtu/hr, using a 1.0 MMBtu/hr natural gas-fired catalytic incinerator (SUR) as VOC control, and exhausting to one (1) stack, identified as SUR-1 (emissions from the entrance to and exit from the Intermediate Coating Oven use no controls and exhaust to one (1) stack, identified as Surfacer Hood Exhaust);

(F) One (1) Intermediate Cool Down area, using no controls, and exhausting to one (1) stack, identified as Surfacer Cooling; and

(G) Main paint mix room

(5) Plastic Bumper Coating Line (PBL), identified as Unit 005, with a capacity of 60 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to increase the oven length to accommodate a new bumper design, consisting of the following units:

(A) One (1) PBL Paint Booth, utilizing the air atomization and electrostatic bell methods of spraying, using a water wash as particulate matter control, and exhausting to four (4) stacks, identified as BPR-1, BPR-2, BPR-JR, and BPR-AP;

(B) One (1) PBL Booth Preheat (oven zone #1), with one (1) natural gas-fired burner with a heat input capacity of 1.5 MMBtu/hr;

(C) One (1) PBL Booth Reheat (oven zone #2), with two (2) insignificant natural gas-fired burners with a total heat input capacity of 2.5 MMBtu/hr;

(D) One (1) PBL Oven (ASH preheat), using a 17.1 MMBtu/hr natural gas-fired thermal incinerator as VOC control, and exhausting to one (1) stack, identified as BPR Inc.;

(E) One (1) PBL Cool Down area;

(F) Two (2) PBL natural gas-fired flash zone heaters for the primer and basecoat zones, each with a heat input capacity of 2.5 MMBtu/hr and exhausting to two (2) separate stacks, permitted in 2010 for construction; and

(G) One (1) paint mixing room

(H) Anticorrosion Coating, identified as Unit 006, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to add two (2) spray coating systems at the Black Coat and Wax Booth to allow more vehicles coated hourly, including the following equipment:

(i) One (1) Black Coat and Wax Booth, utilizing air atomized and air-assisted methods of spraying, using a dry filter as particulate matter control, exhausting to BCW Stack;

(ii) One (1) Black Coat and Wax Booth natural gas-fired burner, with a heat input capacity of 24.0 MMBtu/hr;

(iii) One (1) Anticorrosion Coating Booth, utilizing the air-assisted method of spraying, using a dry filter as particulate control, exhausting to Anticorrosion Stack; and

(iv) One (1) insignificant Anticorrosion Coating natural gas-fired burner.

(6) One (1) plastic fascia paint line system currently identified as PFPLS#2, to be renamed as Unit 005B (if non-Subaru vehicle production ceases), which coats front and rear bumpers, and left and right side molding panels with a maximum capacity of 150,118 units per year, constructed in 2006, consisting of the following units:

(A) One (1) primer spray zone in the PFPLS#2 booth, to be renamed as Unit 005B, currently utilizing air atomized spray with robot method of application and automatic spray applicators with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack , identified as PB2(a). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(B) One (1) basecoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(b). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(C) One (1) clearcoat spray zone, currently utilizing electrostatic bell with robot method of application and automatic spray applicators, with water wash system to control the particulate overspray emissions, and exhausting to one (1) stack, identified as PB2(c). Approved in 2014 to replace current applicator systems with robotic spray applicators utilizing bell application techniques once the non-Subaru vehicle production ceases.

(D) Two (2) paint flash off areas for the primer zone and basecoat zone, exhausting to stack PB2(d), which includes natural gas-fired dry off ovens, with a total heat input capacity of 1.1 MMBtu/hr;

(F) Three (3) natural gas direct fired air intake units, each with a heat input capacity of 3.1 million British thermal units per hour (MMBtu/hr);

(G) One (1) fascia paint line, now Unit 005B natural gas-fired curing oven, with a heat input capacity of 2.5 MMBtu/hr, controlled by a catalytic/thermal oxidizer with a heat input capacity of 1.1 MMBtu/hr, exhausting to one (1) stack, identified as PB2(g). Approved in 2014 to increase oven length.

(H) One (1) paint mix room.

(I) One (1) Natural gas-fired burner with a heat input capacity of 3 MMBtu/hr approved in 2014 for construction.

(J) Six (6) back-up manual spray applicators approved in 2014 for construction.

(7) Final Repair (Touchup) painting, identified as Unit 007, constructed in 1989 and approved in 2014 to increase capacity from 10 units per hour to 15 units per hour including the following::

(A) One (1) Touchup IPC Booth, located in the In-Process Control area, utilizing the air atomization method of spraying;

(8) Trim Line, identified as Unit 010, application in the Body Shop and Trim Shop of adhesives and sealers to various vehicle parts, constructed in 1989 and approved in 2012 for modification which includes increasing the line speed to allow more vehicles to be coated on an hourly basis and approved in 2014 for modification in order to accommodate a production increase from 310,000 vehicles per year to 450,000 vehicles per year.

(A) One (1) Wax Application Line for the application of underbody wax.

(B) Robotic applicators, permitted in 2016 for construction in the window installation area of Trim Line B, Unit 010 to allow for a new quarter glass side window for a new vehicle model.

(9) Six (6) storage tanks, identified collectively as Unit 011, which includes the following equipment:

(A) Gasoline storage tank, with a capacity of 15,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(B) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 1988, using a certified vapor collection and control system; and

(C) Waste purge thinner storage tank, with a capacity of 6,000 gallons, constructed in 1992.

(D) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 2005;

(E) Windshield washer fluid storage tank, with a capacity of 5,000 gallons, constructed in 1988;

(F) Gasoline storage tank, with a capacity of 1,500 gallons, installed in 2004; and

(10) Purge solvent usage and capture system, identified as Unit 012, constructed in 1989 and modified in 2006 and 2010 to allow for purging and capturing of solvent and waterborne purge materials.

Paint Coating Line System C

(1) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through 13-9, consisting of the following units:

(A) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, comprised of six (6) units with a maximum heat input capacity of 1.3 million British thermal units per hour (MMBtu/hr) each and a total maximum heat input of 7.8 MMBtu/hr permitted in 2016 for construction.

(B) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(C) One (1) ED Oven (pretreatment drying oven, with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(D) One (1) ED Body Cool Down Area.

(E) One (1) ED Deck and ED Sand Area.

(F) One (1) Paint Storage Room.

(G) One (1) Working Stage Air House #1 to support the Prep Deck and Offline Areas rated at 11.0 MMBtu/hr, permitted in 2016 for construction.

(H) One (1) Working Stage Air House RFH to support the Surfacer Sand, Wet Sand #1 and #2, ED Sand, Sealer and PVC Area with no heating components.

(2) Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Line, identified as Unit 014, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 3 exhaust stacks, identified as Stacks 14-1 through 14-3, consisting of the following:

(A) One (1) PVC Coating Booth #1, equipped with airless spray application and pedestal robotic spray system, using a dry filter to control the particulate overspray emissions.

(B) One (1) PVC Sealer Oven, with a maximum heat input capacity of3.5 MMBtu/hr, using no control, permitted in 2016 for construction.

(C) One (1) PVC Cool Down Area, using no controls.

(D) One (1) Sealer Application Area, using no controls.

(E) One (1) LASD (Liquid Applied Sound Deadener) Application Area, using no controls.

(3) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(A) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(B) One (1) Intermediate Coating Oven, with a maximum heat input capacity of 10.1 MMBtu/hr, with no VOC control, permitted in 2016 for construction.

(C) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at 2.5 MMBtu/hr, permitted in 2016 for construction.

(D) One (1) Intermediate (Surfacer) Air House rated at 26.5 MMBtu/hr permitted in 2016 for construction.

(E) One (1) Intermediate Cool Down Area, using no controls.

(F) One (1) main paint mix room.

(4) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-1 through 16-26, consisting of the following

(A) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(B) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of 7.6 MMBtu/hr, using a 0.99 MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control permitted in 2016 for construction.

(C) One (1) Topcoat natural gas-fired flash zone heater rated at 2.5 MMBtu/hr permitted in 2016 for construction.

(D) One (1) Topcoat #C1 Cool Down Area, using no controls.

(E) One (1) main paint mix room.

(F) One (1) Topcoat Air House rated at 42.0MMBtu/hr, permitted in 2016 for construction.

(G) One (1) Paint Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

(5) Anticorrosion Coating Operations, identified as Unit 017, with a capacity of 160,000 (if built as part of new paint Line C) or 225,000 units per year (if built as part of existing paint lines A/B), approved in 2014 for construction, venting to 2 exhaust stacks, identified as Stacks 17-1 and 17-2, consisting of the following units:

(A) One (1) Black and Wax Coating Booth, to be part of either the new paint line C or existing paint lines A/B, equipped with air atomized and air-assisted airless spray systems, using a dry filter to control the particulate overspray emissions.

(B) One (1) Black and Wax Coating Booth natural gas-fired burner, with a maximum heat input capacity of 13.7 MMBtu/hr.

(C) One (1) Wax application line, constructed in 2014 in the Trim & Final Assembly Area.

(6) Miscellaneous combustion devices, approved in 2014 for construction:

(A) One (1) Working Stage Air House #2 used to support the Inspection, Touch-up area rated at 11.0 MMBtu/hr.

(2) One (1) Working Stage Air House used to support Paint Coating Line C with no heating components.

(7) Purge solvent usage and capture system, identified as Unit 019, designed to allow for purging and capturing of solvent and waterborne purge materials.

(8) Miscellaneous support cleaning operations, identified as Unit 020, which include wiping solvent and miscellaneous cleanup materials.

(9) An additional Startup and Roll Test Line, approved in 2014 for construction.

(10) Engine assembly -

(A) One (1) additional dynamometer gasoline engine testing, where engines are tested prior to installation in the vehicle chassis, approved in 2014 for construction.

(B) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

Nonapplicable portions of the NESHAP will not be included in the permit. The following requirements shall apply to the above emission units:

40 CFR Part 63.3080 - (All new and existing affected units)
40 CFR Part 63.3081 - (All new and existing affected units)
40 CFR Part 63.3082 - (All new and existing affected units)
40 CFR Part 63.3083(b) - (Existing affected units compliance date is April 26, 2007 and new affected units is upon startup)
40 CFR Part 63.3090 - (Emission limits for new affected units)
40 CFR Part 63.3091 - (Emission limits for existing affected units)
40 CFR Part 63.3092 - (New and existing affected units)
40 CFR Part 63.3093 - (New and existing affected units)
40 CFR Part 63.3094 - (New and existing affected units)
40 CFR Part 63.3100 - (New and existing affected units)
40 CFR Part 63.3101 - (New and existing affected units)
40 CFR Part 63.3110 - (Existing affected units initial notification date is 1 year after April 26, 2004 and new affected units 120 days after startup)
40 CFR Part 63.3120 - (New and existing affected units)
40 CFR Part 63.3130 - (New and existing affected units)
40 CFR Part 63.3131 - (New and existing affected units)
40 CFR Part 63.3150 - (New and existing affected units)
40 CFR Part 63.3151 - (New and existing affected units)
40 CFR Part 63.3152 - (New and existing affected units)
40 CFR Part 63.3160 - (New and existing affected units)
40 CFR Part 63.3161 - (New and existing affected units)
40 CFR Part 63.3163 - (New and existing affected units)
40 CFR Part 63.3164 - (New and existing affected units)
40 CFR Part 63.3165 - (New and existing affected units)
40 CFR Part 63.3166 - (New and existing affected units)
40 CFR Part 63.3167 - (New and existing affected units)
40 CFR Part 63.3168 - (New and existing affected units)
40 CFR Part 63.3170 - (New and existing affected units)
40 CFR Part 63.3171 - (New and existing affected units)
40 CFR Part 63.3173 - (New and existing affected units)
40 CFR Part 63.3175 - (New and existing affected units)
40 CFR Part 63.3176 - (New and existing affected units)
Table 1 to Subpart IIII - (New and existing affected units)
Table 2 to Subpart IIII - (New and existing affected units)
Table 3 to Subpart IIII - (New and existing affected units)
Appendix A to Subpart IIII - (New and existing affected units)

(e) 40 CFR Part 63, Subpart PPPPP - National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands. This NESHAP applies to engine test cells/stands used for testing uninstalled stationary or uninstalled mobile (motive) engines.

The insignificant engine test stands commenced construction in October 2000, which is prior to May 14, 2002. Therefore, they are considered existing affected source as defined in 40 CFR 63.9290(a)(1), and have no applicable requirements under this Subpart, pursuant to 40 CFR 63.9290(b).

(f) 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

This rule applies to industrial, commercial, or institutional boiler or process heater as defined in § 63.7575 that is located at, or is part of, a major source of HAP.

The following existing boilers and process heaters are subject to this rule:

Natural Gas-Fired Boilers and Process Heaters		
Permit Section D.4 (a) (3)	ED/Paint Temperature Control Boiler Cleaver Brooks (1989)	4.0 MMBtu/Hr
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 1 Lochinvar Sync (2009)	1.5 MMBtu/Hr
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 2 Lochinvar Sync (2009)	1.5 MMBtu/Hr
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 3 Lochinvar Sync (2009)	1.5 MMBtu/Hr
Permit Section D. 4 (a)	Pre Treatment Boiler 4 Lochinvar Sync (2009)	1.5 MMBtu/Hr
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 5 Lochinvar Sync (2009)	1.5 MMBtu/Hr
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 6 Lochinvar Sync (2009)	1.5 MMBtu/Hr
Permit Section D.8(a)	Temperature Control Boiler B1-01 Cleaver Brooks (1989)	1.339 MMBtu/Hr
Permit Section D.8(a)	Temperature Control Boiler B10-02	4.184MMBtu/Hr
Permit Section D.8(a)	Temperature Control Boiler B10-01	4.184MMBtu/Hr
Permit Section D.8(a)	Temperature Control Boiler B11-01	2.929 MMBtu/Hr
Permit Section D.8(a)	Temperature Control Boiler B11-02	2.929 MMBtu/Hr
Permit Section D.8(a)	Temperature Control Boiler B09-01	5.23 MMBtu/Hr

Non applicable portions of the NESHAP will not be included in the permit. The following sections of 40 CFR Part 63, Subpart DDDDD shall be applicable to the above new emission units upon startup:

(1) 40 CFR § 63.7480
(2) 40 CFR § 63.7485
(3) 40 CFR § 63.7490(a)(2)
(4) 40 CFR § 63.7491
(5) 40 CFR § 63.7495(a)
(6) 40 CFR § 63.7499
(7) 40 CFR § 63.7500(a)(1),(f)
(8) 40 CFR § 63.7505(a)
(9) 40 CFR § 63.7510(g)
(10) 40 CFR § 63.7515(d)
(11) 40 CFR § 63.7540(a)(11)
(12) 40 CFR § 63.7545(a), (c)
(13) 40 CFR § 63.7550(c(1)(5)(i) through (iv), (xiv), (xvii)
(14) 40 CFR § 63.7555(a)(1)
(15) 40 CFR § 63.7560
(16) 40 CFR § 63.7565
(17) 40 CFR § 63.7570
(18) 40 CFR § 63.7575,
(19) Table 3 to Subpart DDDDD of Part 63 (applicable section)
(20) Table 9 to Subpart DDDDD of Part 63 (applicable section)
(21) Table 10 to Subpart DDDDD of Part 63

State Rule Applicability - PSD Units

(a) 326 IAC 2-2 (Prevention Significant Deterioration)
PSD applicability is discussed under the Permit Level Determination – PSD section.

(b) 326 IAC 2-2-3 (Control technology review; requirements)
A major modification shall apply best available control technology for each regulated NSR pollutant for which the modification would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase of the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

See Appendix D for the PSD BACT analysis.

(c) 326 IAC 2-2-5 (Air Quality Impact; Requirements)
As part of the Paint Line System C, 2014 Project, permitted in PSD/SSM 157-33759-00050, issued on May 19, 2014, an air impact evaluation was performed to determine the potential impact of this project to the formation of ground level ozone.

The minor changes proposed in the sizes of these natural gas combustion units will have no effect on the air quality impact evaluation performed in support of the 2014 Project.

The source will maintain the same natural gas usage limit of 751 million cubic feet per year (MMCF/year) to avoid being subject to 326 IAC 2-2, PSD for NOx emissions.

(d) 326 IAC 6-2-4 (Particulate Emissions from Indirect Heating Facilities)

Based on the final engineering design in this permitting action PSD/SSM 157-36379-00050, the total Q is the following:

Emission Unit Description	Total Maximum Operating Capacity - Q (MMBtu/hr) in PSD/SSM 157-34774-00050 Project (2014)	Final Engineering Design Total Maximum Operating Capacity - Q (MMBtu/hr)
Natural Gas-Fired Combustion Units - New Paint Line C		
ED Pretreatment Boiler	12.0	7.8
ED Oven	9.0	9.0
Bumper Oven	3.0	--
Sealer Oven	3.0	3.5
Surfacer Oven	10.0	10.1
Topcoat Oven	8.0	7.6
Spray Booth Boiler	--	7.5
Total New Units	45.00	45.50
Natural Gas-Fired Combustion Units - Existing Units		
Existing Combustion Units	131.1	131.1
TOTAL Source-wide	**176.10**	**176.60**

Note: Q - Represents worst case assumption that all burners will be indirect fired. Traditional ovens will have a combination of indirect fired (radiant zone) and direct fired in other zones of the oven

Emission Unit Description	Total Maximum Operating Capacity - Q (MMBtu/hr)	Particulate Emissions - Pt (lbs/MMBtu)
PSD/SSM 157-34774-00050 Project (2014)		
Total Natural Gas Combustion	176.1	0.284
PSD/SSM 157-36379-00050 Project		
Total Natural Gas Combustion	~~176.1~~ **176.6**	0.284

State Rule Applicability - Proposed New Units Not Related to the PSD Project

(a) 326 IAC 8-2-2 (Automobile and Light-Duty Truck Coating Operations)
326 IAC 8-2-2, is applicable to facilities performing surface coating operations for automobile and light-duty truck, which include all passenger car or passenger car derivatives capable of seating twelve (12) or fewer passengers and any motor vehicle rated at 3,864 kilograms (eight thousand five hundred (8,500 pounds) gross weight or less which are designed primarily for the purpose of transportation or are derivatives of such vehicles, of which construction commences after January 1, 1980. This rule establishes the following limit:

No owner or operator of an automotive or light duty truck assembly plant subject to this section may cause, allow or permit the discharge into the atmosphere of any volatile organic compounds from the application, flash-off, and curing of prime and topcoat coatings on automobile and light duty truck bodies, hoods, fenders, cargo boxes, doors and grill opening panels to exceed:

(1) 0.23 kilograms per liter of coating (1.9 pounds per gallon), excluding water, delivered to the applicator from prime application, flash-off area and oven operations.

(2) 0.34 kilograms per liter of coating (2.8 pounds per gallon) excluding water, delivered to the applicator from topcoat application, flash-off area and oven operations.

(3) 0.58 kilograms per liter of coating (4.8 pounds per gallon) excluding water, delivered to the applicator from final repair application, flash-off area and oven operations.

Engine testing and window installation operations
The engine testing and window installation operations are not subject to 326 IAC 8-2-2 because they are not the operations specifically subject to the requirements of this rule.

Topcoat #1
The existing Topcoat #1 being modified in this permitting action will continue to be limited under this rule.

(b) 326 IAC 8-1-6 (New facilities; general reduction requirements)
This rule applies to facilities existing as of January 1, 1980 that:
(1) have potential emissions of twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) or more per year;
(2) are located anywhere in the state; and
(3) are not otherwise regulated by:
(A) other provisions of this article;
(B) 326 IAC 20-48; or
(C) 326 IAC 20-56;

shall reduce VOC emissions using best available control technology (BACT).

Window Installation
The material applied to glass substrate for window installation is not subject to 326 IAC 8-1-6 because its VOC potential emissions are less than 25 tons per year.

(c) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
This rule establishes emission limitations particulate emissions from manufacturing processes:

Window Installation
The materials applied to window installation are not subject to 326 IAC 6-3-2 because this operation does not emit particulate.

Topcoat #1
This topcoat #1 being modified in this permitting action will continue to comply with 326 IAC 6-3-2 by utlizing water wash and operating this control in accordance with the manufacturer's specifications.

State Rule Applicability - Entire Source

(a) 326 IAC 2-2 (Prevention of Significant Deterioration)

PSD (79) 1651 issued on July 30, 1987-
Subaru of Indiana Automotive, Inc. is an existing major PSD source, with an initial PSD permit, PSD (79) 1651 issued on July 30, 1987. This PSD permit authorized the initial construction of the light-duty truck and automobile manufacturing plant, consisting of a stamping shop, body shop, paint shop, trim shop and final assembly shop. This PSD

permit limited the source vehicle production to 1,000 vehicles per day and 240,000 vehicles per year, with the VOC and NO_x emissions from this source reviewed pursuant to the requirements of 326 IAC 2-2 (PSD). BACT for VOC was determined to be a combination of daily and coating emissions limits, a source-wide emission limit, specific application methods, and the use of afterburners. BACT for NO_x was determined to be a combination of lb NO_x per MMBtu emission limits, the use of only low-NO_x natural gas burners, and a limit on source-wide natural gas combustion. Source-wide PM emissions were limited to less than 25 tons per year through the inclusion of lb/hr and kg/kL emission limits for each operation. Note, that the PTE of SO_2 and CO were less than the respective PSD significance thresholds. However, the permit limited the source-wide emissions of these pollutants to less than 40 and 100 tons per year, respectively. PM10 was not reviewed for this permit because it was not a regulated pollutant at the time this permit was issued.

Revision to PSD (79) 1651, issued on July 26, 1989 -
On March 23, 1989, SIA submitted a permit application to revise PSD (79) 1651. This application contained proposed changes to the permit application for PSD (79) 1651 and included several requests for revisions of limitations included in PSD (79) 1651. These changes were necessary to ensure that PSD (79) 1651 correctly reflected expected operations and addressed the equipment that was actually installed. On July 26, 1989, the OAQ issued a revision to PSD (79) 1651 to: change the original allowable production rate, add new coatings; change coating application methods; change anticipated control efficiencies and emission rates; increase the allowable amount of gasoline handled; add natural gas combustion units; and revise the design heat input capacities of the combustion units. More specifically:

The general BACT requirements for VOC were unchanged, although some specific coating limits and requirements for afterburners were modified. Limits on the allowable VOC content of coatings were revised for some coating operations. The allowable daily VOC emissions from each manufacturing operation were also revised, but the total source-wide VOC emission limit of 1,506 tons per year was not changed. As a result, the VOC BACT from PSD (79) 1651, issued July 30, 1987, was not re-evaluated.

The general BACT requirements for NO_x were unchanged, although the specific lb/MMBtu limits for each natural gas combustion unit were revised based on a re-evaluation of BACT for the combustion facilities installed. Several combustion units were also added but the limit on total natural gas usage was unchanged. As a result, the potential NO_x emissions increased by 1.1 tons per year to 167.8 tons per year and an Ambient Air Quality Impact Analysis was performed for NO_x.

To account for changes to the coating operations, the lb/hr and kg/kL PM emission limits for nearly all operations were revised and new PM emission limits were added for the Touchup (Paint) operation. In addition, the source-wide production limit was reduced from 1000 vehicles per day and 240,000 vehicles per year to 917 vehicles per day and 200,000 vehicles per year. As a result, the source-wide potential PM emissions increased by 0.8 tons but remained less than 25 tons per year. Because the new source-wide PM PTE remained less than 25 tons per year, the requirements of 326 IAC 2-2 (PSD) remained not applicable with respect to PM. Although PM10 was a regulated pollutant in 1989, it was not reviewed for the revision to the PSD permit because no physical or operational modification was made that increased emissions significantly.

The source-wide emission limits for SO_2 and CO (40 and 100 tons per year, respectively) were not changed so the requirements of 326 IAC 2-2 (PSD) remained not applicable with respect to SO_2 and CO.

CP 157-4485-00050, issued on September 13, 1995 -
On September 13, 1995, the source was issued CP 157-4485-00050 to increase SIA's production from 917 vehicles per day and 200,000 vehicles per year to 1,092 vehicles per day and 240,000 vehicles per year. No new units were added by this permit. To

accommodate the increase in production and increase operational flexibility, the existing source-wide VOC emission limit of 1,503 tons per year was increased to 1,536 tons per year, individual operation-specific PM limits were combined into a total pound per hour limit (with no increase in PM emissions), and various operation-specific daily VOC limits were consolidated into a single 13,705 pound per day source-wide VOC limit. Note that IDEM has since determined that the incorporation of a source-wide lb PM/hr emission limitation was inappropriate; therefore, this limit has been removed from the Part 70 permit and replaced with requirements for record keeping and reporting sufficient to demonstrate annual particulate emissions of less than 25 tons per year. IDEM has also determined that the PSD netting analysis completed for CP 157-4485-00050 overestimated the magnitude of emissions reductions and failed to make the credited reductions federally enforceable. See the Existing Approvals section of this document for additional information.

PM10 was not reviewed in the CP 157-4485-00050 permit. Based on the data available average actual PM10 emissions for 1993 and 1994 were calculated to be 8.1 tons per year. Since a 15 ton per year net increase would be allowed, the source could emit up to 23.1 tons of PM10 per year without triggering PSD. Therefore, a source-wide limit has been added to this Part 70 permit of 23.1 tons per year for PM10. Because there have been no distinctions made between PM and PM10 emissions and for ease of compliance and recordkeeping, the PM limit has also been revised to be 23.1 tons per year. The limit is provided in the form of an equation to allow flexibility to the source while still maintaining enforceability.

CP 157-9619-00050, issued on February 11, 1999 -
On February 11, 1999, the source was issued CP 157-9619-00050 to permit: the construction of a new PVC Undercoating Booth, the physical separation between Isuzu and Subaru model lines, and the replacement of an electrostatic spray applicator with an air atomization spray coating system on the existing Plastic Bumper Coating Booth. This modification also permitted an increase in the production limit from 240,000 to 262,000 vehicles per year and an increase in the daily VOC limit from 13,705 to 14,352 pounds of VOC per day based on a netting analysis. Despite the production and daily VOC emission increase, the source-wide VOC emission limit (previously allowed by CP 157-4485-00050) was reduced by 115 tons to 1,421 tons per year to accommodate operational changes which had reduced the amount of VOC emitted per vehicle. In addition, the hourly PM emission limit was reduced to 11.91 pounds PM per hour, but the source-wide PM emission limit remained unchanged at less than 25 tons per year.

Initial Part 70 Operating Permit No. 157-5906-00050, issued on June 28, 2004 -
During the initial Part 70 Operating Permit review process, the PM limits made via CP 157-4485-00050, issued September 13, 1995, and CP 157-9619-00050, issued February 11, 1999, have been removed from the Part 70 permit and replaced with requirements for record keeping and reporting sufficient to demonstrate annual particulate emissions of less than 25 tons per year. See the Existing Approvals section of this document for additional information. The source-wide NO_x, SO_2, and CO emission limits from CP 157-4485-00050, issued September 13, 1995, were unchanged. The sourcewide VOC emission limit of 1,421 tons per year from surface coating operations and associated purge solvent operations and storage was changed in the initial Part 70 Operating Permit 157-5906-00050 to 1,128 tons per year. Additionally, this initial Part 70 Operating Permit also deleted the daily vehicle limit of 1,200 vehicles. See the Existing Approvals section of this initial Part 70 Operating Permit for detailed explanation.

Significant Source Modification No. 157-22702-00050, issued on June 9, 2006 -
This Significant Source Modification No. 157-22702-00050, issued on June 9, 2006 limited the VOC emissions to 415.5 tons per year from the Topcoat System, identified as Unit 003, authorized installation of the Plastic fascia Paint Line including booth dry-off ovens, a curing oven and catalytic incinerator, subject to a VOC limit of 102.6 tons/year, which limit also includes VOC emissions from wiping/cleaning solvents (that are separately limited to 24.2 tons per year) and VOCs from natural gas combustion units

associated with the Plastic Fascia Paint Line and dry off oven at 5.5 pound per million cubic feet of natural gas usage. These combustion units are limited to 166.4 million cubic feet of natural gas usage annually. In addition, the limit on sourcewide VOC emissions was reduced from 1,128 tons per year to 1,087 tons per year to avoid PSD review for this source modification.

PSD/SSM 157-29566-00050 addresses the elimination of the 63% control efficiency on the Sealing and PVC Undercoating Line, Unit 002, that was erroneously used in the VOC PTE calculations in SSM 157-22702-00005, incorporates the VOC carryover data for sealer and PVC undercoating materials, and confirms that SSM 157-22702-00005 is not subject to the requirements of 326 IAC 2-2, PSD.

PSD/SSM 157-29566-00050, issued on December 22, 2010
This source modification allowed the source to make certain physical modification to some existing PSD emission units to accommodate the increase in production rate from 262,000 vehicles per year to 310,000 vehicles per year and to allow the use of waterborne basecoat materials in combination with clearcoat materials at the Topcoat #3 Booth and Bumper Systems. Although there was an increase in vehicle production by 18.3%, the source-wide surface coating operations, associated purge solvent operations and wiping/cleaning solvents, and storage current VOC emissions limit was reduced from 1,087 tons/year to 1,084.5 tons/year.

PSD/SSM 157-31887-00050, issued on October 4, 2012
This source modification allowed the production of new vehicle styles and allow more vehicle production on an hourly basis to achieve the plant's permitted annual production rate of 310,000 vehicles per year while minimizing weekday overtime and/or weekend operations.

PSD/SSM 157-33759-00050, issued on December 23, 2014
This source modification allowed for construction of a new paint line system, identified as C and its control equipment that will allow an increase in vehicle production from 310,000 vehicles per year to 450,000 vehicles per year. The new Paint Line System C has a maximum production capacity of 160,000 vehicles per year. By allowing the new paint line system to operate up to its physical production capacity, SIA will have operating flexibility to potentially use the new paint line to paint more than 140,000 vehicles, while correspondingly reducing the number of vehicles painted in the existing paint shop.

PSD/SSM 157-34774-00050, issued on December 23, 2014
This source modification allowed for the construction of new combustion emission units instead of the combustion emission units originally permitted in PSD/SSM 157- 33759-00050.

(b) 326 IAC 2-6 (Emission Reporting)
This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted annually by July 1 of each year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by a responsible official" as defined by 326 IAC 2-7-1(34).

The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

(1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability Determination - Individual Facilities

(a) 326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

This rule applies to new facilities constructed as of January 1, 1980, with potential VOC emissions of 25 tons per year or more, located anywhere in the state, and are not otherwise regulated by other provisions of article, 326 IAC 8.

(1) Plastic Bumper Line (PBL) - This paint line was determined in PSD (79) 1651, issued on July 30, 1987 and revised on July 26, 1989 to be subject to the following PSD BACT, which satisfies the requirements of 326 IAC 8-1-6:

(A) The daily VOC emissions from the PBL Coating Booth shall not exceed 38.2 pounds of VOC per gallon of applied solids (4.57 kilograms of VOC per liter of applied solids). This limit applies to the weighted average of all plastics bumper coatings.

(B) The thermal incinerator, used to control VOC emissions from the PBL Oven, shall achieve a minimum destruction efficiency of 90%.

(C) Pretreatment Cleaning shall utilize only VOC free detergents, conditioners, and rinses in the body pre-treatment cleaning operations.

(D) Pertaining to purge solvent use:

(i) Purge solvent capture systems will be utilized each time that any coating application equipment is purged. The purge solvent capture systems shall have a minimum

overall capture efficiency of at least eighty percent (80%). Collected purge solvent shall be retained in closed conveyances to the Permittee's purge solvent reclamation system for on-site reclamation and recycling or in closed containers until such time as they are shipped offsite for disposal or recycling.

(ii) Block painting will be utilized whenever possible to minimize color changes and the resulting purge.

Compliance with the VOC BACT emission limit shall be determined with the following equation:

VOC emissions (lb VOC/gal applied solids) = $[\sum(C \times U) / \sum(S \times TE)] \times [1 - (CE \times DE)]$

Where:

C is the VOC content of the coating in pounds of VOC per gallon of coating, as applied;
U is the usage rate of the coating in gallons per day;
S is the usage rate of coating solids in gallons per day;
TE is the transfer efficiency of the applicator;
CE is the capture efficiency of the incinerator; and
DE is the minimum destruction efficiency of the incinerator

(2) Plastic Fascia Paint Line (PFPLS#2) - This paint line was determined in Significant Source Modification No. 157-22702-00050, issued on June 9, 2006 to be subject to 326 IAC 8-1-6 with BACT requirements as follows:

(A) The annual VOC usage, including wiping/cleaning solvents, and solvent purging to the plastic fascia paint line (PFPLS#2), and natural gas usage from the combustion devices associated with this fascia paint line and natural gas usage from the combustion devices associated with the fascia paint line and existing Topcoat, Unit 003 modification shall be limited such that the total potential to emit does not exceed 102.6 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

(B) The exhausts from the fascia paint line curing oven shall be vented to a thermal oxidizer. The thermal oxidizer shall achieve a minimum VOC destruction efficiency of 95% and a minimum overall control efficiency (capture efficiency x destruction efficiency) of 21%.

(C) The fascia paint line shall comply with the following Best Available Control Technology limitations for Volatile Organic Compounds (VOC):

(i) The VOC emissions, after control, from the primer coating process, shall not exceed 0.90 pound per gallon of coating (lbs/gal).

(ii) The VOC emissions, after control, from the basecoat coating process, shall not exceed 1.15 lbs/gal of coating.

(iii) The VOC emissions, after control, from the clearcoat coating process, shall not exceed 3.25 lbs/gal of coating.

(D) Good work practices which includes the following:

(i) The use of robotic automatic spray applicators to minimize paint usage.

(ii) The use of waterbased coatings for the primer, and basecoat applications.

(iii) All paint mixing containers, other than day tanks equipped with continuous agitation systems, which contain organic VOC containing coatings and other materials shall have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

(iv) Solvent-borne purge materials sprayed during paint line cleaning and color changes shall be directed into solvent collection containers. Documentation shall be maintained on-site to demonstrate how these materials are being directed and collected for both the solvent-borne and water-borne purge materials.

(v) Solvent collection containers shall be kept closed when not in use.

(vi) Clean-up rags with solvent shall be stored in closed containers.

(vii) VOC emissions shall be minimized during cleaning of storage, mixing, and conveying equipment.

(D) The purge solvent capture systems shall have a minimum purge solvent capture efficiency of 80%. Collected purge materials (paint solids and solvent) from the primer and clearcoat applicators shall be retained in closed containers until recycled on-site or shipped offsite for recycling or disposal.

The VOC limit for the solvent purging operation shall be determined using the following:

(1) Purge solvent usage and collection shall be monitored separately for the primer coating operations and clearcoat operations. For each of the primer and clearcoat coating systems, the Permittee shall install flow meters to monitor the volume of purge solvent delivered to the spray applicators, and the volume of the purge materials collected for recycling or disposal. The purge material collection/capture, as a percentage of purge solvent usage shall be determined on a monthly basis as follows:

Purge Solvent Collection/Capture Efficiency = $\frac{S_c - R_{cs}}{P_u}$

Where:

Rcs = Residual coating solids in the spray applicator
Sc = Purge material collected (paint solids + solvent)
Pu = Purge solvent usage

Compliance with the VOC limit shall be determined by using the following equation, which calculates the tons of VOC emissions per month, and adding the result to the calculated VOC emissions from the previous eleven months:

Total VOC Emissions (tons/month) = natural gas combustion units heaters, curing oven, and oxidizer) VOC+ fascia paint line (wiping/cleaning solvent, and

solvent purging) VOC

Where:

(1) Natural Gas Combustion VOC = Natural gas usage (MMCF/month) * 5.5 lb/MMCF

(2) Fascia Paint Line VOC = $\sum$ (Booths C_u x S x C x P) + (Oven C_u x S x C x P x (1-DE)) + (P_u x P_c x P x (1-P_{cw}))

Where:
C_u is coating usage in gallon per unit
S is the percentage booth split with oven
C is the coating VOC content in pound per gallon
P is the production in units per month
Pu is the purge solvent usage in gallon per unit
Pc is the purge VOC content in pound per gallon
DE is the destruction efficiency of the oxidizer
Pcw is the percent purge materials collected/captured for waste recycle

Compliance with the VOC BACT limits which apply after controls to emissions from the fascia paint line shall be determined by using the following equation:

Booth VOC BACT limit = Vc/Cy

Where:
Vc is the controlled VOC emissions of the booths in pound per year
Cy is the booths coating usage in gallon per year

(b) 326 IAC 8-2-2 (Automobile and Light-Duty Truck Coating Operations)

326 IAC 8-2-2, is applicable to facilities performing surface coating operations for automobile and light-duty truck, which include all passenger car or passenger car derivatives capable of seating twelve (12) or fewer passengers and any motor vehicle rated at 3,864 kilograms (eight thousand five hundred (8,500 pounds) gross weight or less which are designed primarily for the purpose of transportation or are derivatives of such vehicles, of which construction commences after January 1, 1980. This rule establishes the following limit:

No owner or operator of an automotive or light duty truck assembly plant subject to this section may cause, allow or permit the discharge into the atmosphere of any volatile organic compounds from the application, flash-off, and curing of prime and topcoat coatings on automobile and light duty truck bodies, hoods, fenders, cargo boxes, doors and grill opening panels to exceed:

(1) 0.23 kilograms per liter of coating (1.9 pounds per gallon), excluding water, delivered to the applicator from prime application, flash-off area and oven operations.

(2) 0.34 kilograms per liter of coating (2.8 pounds per gallon) excluding water, delivered to the applicator from topcoat application, flash-off area and oven operations.

(3) 0.58 kilograms per liter of coating (4.8 pounds per gallon) excluding water, delivered to the applicator from final repair application, flash-off area and oven operations.

The following facilities are subject to 326 IAC 8-2-2 as follows:

Pursuant to 326 IAC 8-2-2, the Permittee shall not allow the discharge of VOC into the atmosphere in excess of the following limits:

Topcoat #1 Booth, Topcoat #2 Booth, and Topcoat #3 Booth:

(1) The daily VOC emissions from the Topcoat booths (Topcoat #1 Booth, Topcoat #2 Booth, and Topcoat #3 Booth) shall not exceed 15.3 pounds of VOC per gallon of applied solids (1.83 kilograms of VOC per liter of applied solids) (site-specific RACT limit established pursuant to 325 IAC 8-1-5 (Petition for alternate controls)). This limit applies to the weighted average of all Topcoat coatings.

Intermediate Coating Booth:

(2) The daily VOC emissions from the Intermediate Coating Booth shall not exceed 15.3 pounds of VOC per gallon of applied solids (1.83 kilograms of VOC per liter of applied solids) (site-specific RACT limit established pursuant to 325 IAC 8-1-5 (Petition for alternate controls)). This limit applies to the weighted average of all Intermediate coatings.

Final Repair booth (Touchup IPC Booth):

(3) The daily VOC emissions from the Final Repair booths (Touchup IPC Booth) shall not exceed 4.84 pounds of VOC per gallon of coating less water (0.58 kilograms of VOC per liter of coating less water). This limit applies to the weighted average of all Final Repair coatings and solvents.

ED Body Coating Tank

(4) The daily VOC emissions from the ED Body Coating Tank shall not exceed 1.17 pounds of VOC per gallon of coating less water (0.14 kilograms of VOC per liter of coating less water) (site-specific RACT limit established pursuant to 325 IAC 8-1-5 (Petition for alternate controls).

Compliance with the VOC emission limits from the Topcoat #1 Booth, Topcoat #2 Booth, and Topcoat #3 Booth, Intermediate Coating Booth and Final Repair booth (Touchup IPC Booth), shall be determined with the following equation:

Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the incinerators (TC-1, TC-2, TUT, and SUR) shall be no less than the equivalent overall efficiency calculated by the following equation:

$$O = \frac{V - (E * TE)}{V} * 100$$

Where:

V = The actual VOC content of the coating or, if multiple coatings are used, the daily weighted average VOC content of all coatings, as applied to the subject coating line as determined by the applicable test methods and procedures specified in 326 IAC 8-1-4 in units of pounds of VOC per gallon of coating solids as applied.

E = 326 IAC 8-2-2 emission limit in pounds of VOC per gallon of applied solids.

TE = The overall transfer efficiency of the applicator for all coatings applied in the subject coating line, expressed as a decimal.

O = Equivalent overall efficiency of the capture system and control device as a percentage.

VOC emissions (lb VOC/gal applied solids) = $[\sum(C \times U) / \sum(S \times TE)] \times [1 - CE \times DE)]$

Where:

C is the VOC content of the coating in pounds of VOC per gallon of coating, as applied;
U is the usage rate of the coating in gallons per day;
S is the usage rate of coating solids in gallons per day;
TE is the transfer efficiency of the applicator;
CE is the capture efficiency of the incinerator; and
DE is the minimum destruction efficiency of the incinerator required in Condition D.4.1.

Or, if the emission limit is in units of pounds of VOC per gallon of coating less water:

VOC emissions (lb VOC/gal coating less water) = $[\sum (C \times U) / \sum U] \times [(1 - (CE \times DE))]$

Where:

C is the VOC content of the coating in pounds of VOC per gallon of coating less water, as applied;
U is the usage rate of the coating in gallons per day;
CE is the capture efficiency of the incinerator; and
DE is the minimum destruction efficiency of the incinerator required in Condition D.4.1.

(c) 326 IAC 8-2-9 (Miscellaneous Metal Coating)

326 IAC 8-2-9 applies to facilities which commences construction after July 1, 1990, located in any county and which have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls. This rule applies to the following:

(1) Large and small farm machinery.

(2) Small household appliances.

(3) Office equipment.

(4) Industrial machinery.

(5) Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of major groups #33, #34, #35, #36, #37, #38, and #39.

326 IAC 8-2-9 applies to Subaru's metal parts coating operations because these operations belong to SIC Code #37. These facilities are subject to the following limits:

<u>PVC Undercoating Booths:</u>

(1) The daily VOC emissions from Sealing and PVC Undercoating (PVC Undercoating Booth #1 and PVC Undercoating Booth #2) shall not exceed 3.5 pounds of VOC per gallon of coating less water (0.42 kilograms of VOC per liter of coating less water).

<u>Anticorrosion Coating (Black and Wax Booth and Anticorrosion Coating Booth:</u>

(2) The daily VOC emissions from Anticorrosion Coating (Black and Wax Booth and Anticorrosion Coating Booth) shall not exceed 3.0 pounds of VOC per gallon of coating less water (0.36 kilograms of VOC per liter of coating less water). This limit applies to the weighted average of all

Anticorrosion coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

The emission limit of pounds of VOC per gallon of coating less water from the PVC Undercoating Booths, and Anticorrosion Coating (Black and Wax Booth and Anticorrosion Coating Booth shall be determined using the following equation:

VOC emissions (lb VOC/gal coating less water) = $[\sum (C \times U) / \sum U]$

Where:

C is the VOC content of the coating in pounds of VOC per gallon of coating less water as applied;
U is the usage rate of the coating in gallons per day

(d) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
This rule applies to the following surface coating operations which are required by this rule to be controlled by a dry particulate filter, waterwash, or an equivalent control device, and shall operate the control device in accordance with manufacturer's specifications.

The following emission units are subject to 326 IAC 6-3:

PBL Paint Booth, Plastic Fascia Paint Line (PFPLS#2), Topcoat Booths (Topcoat Booths #1 #2 and #3 Booth, Intermediate Coating Booth, Repair Booth, Black and Wax Booth, PVC Undercoating Booths #1 and #2:

(1) These booths are in compliance with 326 IAC 6-3, because each booth is using a waterwash to control the particulate emissions, and each waterwash is operated in accordance with manufacturer's specifications.

The sealing application is not subject to 326 IAC 6-3-2, because it does not emit particulate.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source’s failure to take the appropriate corrective actions within a specific time period.

This modification will not affect the compliance monitoring determined for the 2014 Project.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 157-27048-00050. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

(a) Sections A.2, A.3, D.4, D.7, D.10, E.1, E.2 and E.4 have been modified to incorporate the new emission units proposed in this permitting action, SSM/PSD No. 157-36379-00050; while Section E.5 and E.6 have been added to address the new NSPS and NESHAP applicable to these units.

(b) Unit identified in Sections A.2(c)(16), D.4(16), E.1(c)(16), and E.2(c)(16) has been deleted since this unit was removed from operation.

(c) Sections A.2(d)(2), D.4(d)(2), E.1(d)(2), and E.2(d)(2), have been modified by removing descriptive information pertaining to the "stone guard (SGC)" since this material is no longer used.

(d) The PBL- C (unit 018), identified in Sections A.2(f), D.3(f), and E.1(f) has been deleted since this unit will not be installed.

(e) IDEM, OAQ has modified Conditions D.1.1(c) and D.9.1(c) to include NOx short term limit to render the requirements of 326 IAC 2-2, PSD rules not applicable.

(f) The Part 70 Operating Permit terms and conditions have been clarified and typographical errors have been corrected throughout the permit.

Section A Changes:

Modified Section A.2 and Section A.3 as a result of the combustion units change:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(14)]

This stationary source consists of the following emission units and pollution control devices:

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(b) Sealing and PVC Undercoating Line, identified as Unit 002, with a capacity of 77 units per hour, constructed in 1989 and approved for modification in 2012, consisting of the following units:

***

(4) One (1) PVC Coating Booth #2 Preheat (oven zone #2), constructed in 1999, with one (1) natural gas direct fired burner with a heat capacity of ~~16.8~~ **3.5** MMBtu/hr;

***

(c) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, ~~and~~ modified in 2006, **2008,** 2009**, 2010** and 201~~0~~**3**, **and approved in 2016 for modification,** consisting of the following units:

(1) One (1) Topcoat #1 Booth, **approved in 2016 to replace existing spray applicators with automated electrostatic bell type spray applicators**-- ~~utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, and automatic spray applicators~~, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of **2.**5 MMBtu/hr;

***

(9) One (1) Topcoat #2 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-2 Inc. (emissions from the entrance to and exit from the Topcoat #~~1~~**2** Oven are not controlled and exhaust to one (1) stack, identified as TC-2 Ex.). The oven is equipped with a purge exhaust stack;

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~~(16) One (1) Wet Sand Repair direct fired Dryoff Oven, with one (1) insignificant natural gas-fired burner with a heat input capacity of 1.49 MMBtu/hr ;~~

(~~17~~**16**) One (1) Topcoat #3 Booth natural gas indirect fired flash zone heater between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr, permitted in 2010 for construction; and

(~~18~~**17**) Main paint mix room.

***

(d) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to include alterations to the conveyor system that will add storage capacity to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

(1) One (1) Intermediate Working Stage burner (oven zone #1), with a heat input capacity of 2.5 MMBtu/hr;

(2) One (1) Intermediate Coating Booth, utilizing, two (2) robots, for the application of anti-chip (ACC) ~~and stone guard (SGC),~~ two (2) manual air assisted spray guns for the application of primer on inner doors for certain colors, followed by the exterior robot e-stat painting process, using a water wash as particulate control, and exhausting to six (6) stacks, identified

***

(f) Anticorrosion Coating, identified as Unit 006, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to add two (2) spray coating systems at the Black Coat and Wax Booth to allow more vehicles coated hourly, including the following equipment:

(1) One (1) Black Coat and Wax Booth, utilizing the air atomized and air-assisted airless methods of spraying, using a dry filter as particulate matter control, exhausting to BCW Stack;

(2) One (1) Black and Wax Coat natural gas direct fired burner, with a heat input capacity of 24.0 MMBtu/hr;

(3) One (1) Anticorrosion Coating Booth, utilizing the air-assisted method of spraying, using a dry filter as particulate control, exhausting to Anticorrosion Stack; and

(4) One (1) insignificant Anticorrosion Coating natural gas-fired burner.

~~Approved in 2014 for physical modification and operational change as part of the proposed "2014 Increase in Capacity Project" for the plastic bumper coating operations. This will involve the following three (3) alternative operating scenarios for coating plastic bumper parts for Subaru vehicles:~~

~~Scenario #1 - involves the use of the following facilities to coat Subaru vehicles if~~

~~cessation of production of the non-Subaru vehicles occurs before construction of proposed Paint Line C is complete:~~

~~Conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for 110,000 Subaru vehicles, vehicles per year. The converted paint line will be renamed Unit 005B.~~

~~Use of existing Unit 005 with of 250,000 units per year~~

~~Scenario #2 - involve increasing Unit 005B capacity from 110,000 to 250,000 units per year while not installing the Plastic Bumper Line, Unit 018 in Paint Line C.~~

~~Use of existing Unit 005 with capacity of 250,000 units per year~~

~~Scenario #3 - involve installing the Paint Line "C" Plastic Bumper Line, Unit 018 with a capacity of 160,000 units per year.~~

~~Use of existing Unit 005B (110,000 units per year) without increasing its capacity.~~

~~Use of the existing Unit 005 with capacity of 250,000 units per year~~

(g) One (1) plastic fascia paint line system**,** currently identified as PFPLS#2, **approved in 2014 for physical modification and operational change as part of the proposed "2014 Increase in Capacity Project" for the plastic bumper coating operations. This will involve conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for Subaru vehicles, with an increase in capacity from 110,000 to 250,000 vehicles per year. PFPLS#2** ~~to~~ **will** be renamed as Unit 005B, once production of non-Subaru vehicle ceases, which coats front and rear bumpers, and left and right side molding panels, with a maximum capacity of 150,118 units per year, constructed in 2006, and consisting of the following units:
***

(i) Trim Line, identified as Unit 010, application in the Body Shop and Trim Shop of adhesives and sealers to various vehicle parts, constructed in 1989 and approved in 2012 for modification which includes increasing the line speed to allow more vehicles to be coated on an hourly basis and approved in 2014 for modification in order to accommodate a production increase from 310,000 vehicles per year to 450,000 vehicles per year:

(1) One (1) **Trim** Wax **Application Line** ~~Booth for the application of underbody wax~~.

(2) One (1) startup and roll test operation.

(3) Robotic applicators, permitted in 2016 for construction in the window installation area of Trim Line B, Unit 010 to allow for a new quarter glass side window for a new vehicle model.

(4) Approved in 2016 to include chemical compound trans-1,3,3,3-tetrafluoropropene in the air conditioning refrigerant for use in vehicles assembled on Trim Lines A and B.

Paint Coating Line System C, with a maximum capacity of 160,000 vehicles per year, approved in 2014 for construction, dedicated in coating of the increase in vehicle production, consisting of the following units:

(a) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through 13-9 consisting of the following units:

(1) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, **comprised of six (6) units with a maximum heat input capacity of 1.3 million British thermal units per hour (MMBtu/hr) each and a total maximum heat input of 7.8 MMBtu/hr** ~~with a maximum heat input capacity of 12 million British thermal units per hour (MMBtu/hr).~~ **permitted in 2016 for construction.**

(2) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(3) One (1) ED Oven (pretreatment drying oven), with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(4) One (1) ED Body Cool Down Area.

(5) One (1) ED Deck and ED Sand Area.

(6) One (1) Paint Storage Room.

(7) One (1) Working Stage Air House **#1** to support the ~~Sealer, PVC, ED Sand, Wet Sand #2 Area rated at 9.5 MMBtu/hr~~ **Prep Deck and Offline Areas rated at 11.0 MMBtu/hr, permitted in 2016 for construction.**

(8) One (1) Working Stage Air House **RFH** to support the Surfacer Sand, Wet Sand #1 **and #2, ED Sand, Sealer and PVC** Area ~~rated at 2.6 MMBtu/hr~~ **with no heating components.**

(b) Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Line, identified as Unit 014, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 3 exhaust stacks, identified as Stacks 14-1 through 14-3, consisting of the following:

(1) One (1) PVC Coating Booth #1, equipped with airless spray application and pedestal robotic spray system, using a dry filter to control the particulate overspray emissions.

(2) One (1) PVC Sealer Oven, with a maximum heat input capacity of ~~3.0~~ **3.5** MMBtu/hr, using no control, **permitted in 2016 for construction**.

(3) One (1) PVC Cool Down Area, using no controls.

(4) One (1) Sealer Application Area, using no controls.

(5) One (1) LASD (Liquid Applied Sound Deadener) Application Area, using no controls.

(c) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(1) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Intermediate Coating Oven, with a maximum heat input capacity of ~~10~~ **10.1** MMBtu/hr, with no VOC control, **permitted in 2016 for construction**.

(3) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at ~~3.0~~ **2.5** MMBtu/hr, **permitted in 2016 for construction**.

(4) One (1) Intermediate (Surfacer) Air House rated at ~~21.6~~ **26.5** MMBtu/hr **permitted in 2016 for construction**.

(5) One (1) Intermediate Cool Down Area, using no controls.

(6) One (1) main paint mix room.

(d) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-1 through 16-26, consisting of the following:

(1) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of ~~8.0~~ **7.6** MMBtu/hr, using a ~~1.0~~ **0.99** MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control, **permitted in 2016 for construction**.

(3) One (1) Topcoat natural gas-fired flash zone heater rated at ~~3.0~~ **2.5** MMBtu/hr **permitted in 2016 for construction**.

(4) One (1) Topcoat #C1 Cool Down Area, using no controls.

(5) One (1) main paint mix room.

(6) One (1) Topcoat Air House rated at ~~38~~ **42.0** MMBtu/hr, **permitted in 2016 for construction**.

(7) One (1) **Paint** Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

(e) Anticorrosion Coating Operations , identified as Unit 017, with a capacity of ~~160,000 (if built as part of new paint Line **C**) or~~ 225,000 units per year (~~if~~ **to be** built as part of existing paint lines ~~"A/B"~~ **A/B**), approved in 2014 for construction, venting to 2 exhaust stacks, identified as Stacks 17-1 through 17-2**,** consisting of the following units:

(1) One (1) Black and Wax Coating Booth, to be part of ~~either the new paint line or~~ existing paint lines ~~"A/B"~~ **A/B**, equipped with air atomized and air-assisted airless spray systems, using a dry filter to control the particulate overspray emissions.

(2) One (1) Black and Wax Coating Booth natural gas-fired burner, with a maximum heat input capacity of ~~15.5~~ **13.7** MMBtu/hr, **permitted in 2016 for construction**.

(3) One (1) ~~Wax Coating Booth, constructed in 2014~~ **wax application line** in the Trim & Final Assembly Area, ~~utilizing air-assisted spray system, with no particulate overspray control.~~

The following units at the Plastic Bumper Coating Line (PBL-C) have been deleted since they were not constructed:

~~(f) Plastic Bumper Coating Line (PBL-C), identified as Unit 018, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 18 exhaust stacks, identified as Stacks 18-1 through 18-18, consisting of the following units (see operating scenarios for Unit 005B):~~

~~(1) One (1) PBL-C Paint Booth, equipped with air atomization and electrostatic bell spray systems, using dry filtration or water wash system to control the particulate overspray emissions.~~

~~(2) One (1) PBL-C Oven, with a maximum heat input capacity of 3.0 MMBtu/hr, using no VOC controls.~~

~~(3) One (1) PBL-C Cool Down area.~~

~~(4) One (1) paint mixing room.~~

~~(5) Three (3) Bumper Air Houses (includes Primer Air House, basecoat Air house and Clearcoat Air House), rated at a total of 17.7 MMBtu/hr.~~

~~(6) One (1) PBL-C natural gas-fired flash zone heater located between the primer and basecoat zones rated at 3.0 MMBtu/hr.~~

~~(7) One (1) PBL-C natural gas-fired flash zone heater located between the basecoat and the clearcoat zones rated at 3.0 MMBtu/hr.~~

~~(8) One (1) Working Stage Air House rated at 4.4 MMBtu/hr.~~

~~(9) One (1) Mixing Air House located in Mixing Room rated at 1.8 MMBtu/hr.~~

(g) Miscellaneous combustion devices, approved in ~~2014~~ **2016** for construction:

(1) One (1) Working Stage Air House **#2** used to support the Inspection, Touch-up area rated at ~~6.5~~ **11.0** MMBtu/hr.

(2) One (1) Working Stage Air House used to support Paint Coating Line ~~"~~C~~"~~ **with no heating components.** ~~rated at 2.4 MMBtu/hr~~.

(h) Purge solvent usage and capture system, identified as Unit 019, approved in 2014 for construction, designed to allow for purging and capturing of solvent and waterborne purge materials.

(i) Miscellaneous support cleaning operations, identified as Unit 020, approved in 2014 for construction, which include wiping solvent and miscellaneous cleanup materials.

(j) An additional Startup and Roll Test Line, approved in 2014 for construction.

(k) Engine assembly -

(1) **O**~~o~~ne (1) additional dynamometer gasoline engine testing, where engines are tested prior to installation in the vehicle chassis, approved in 2014 for construction.

(2) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

A.3 ~~Specifically Regulated~~ Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(14)]

This stationary source also includes the following insignificant activities ~~which are specifically regulated,~~ as defined in 326 IAC 2-7-1(21):
***

(3) Other insignificant natural gas combustion units approved in 2014 **and 2016** for construction: [326 IAC 2-2]

(A) Rooftop Units - ~~53 Units~~
- Engine Assembly Expansion - 4 Units (1.6 MMBtu/hr total)
- Engine Warehouse Expansion - 2 Units (0.8 MMBtu/hr total)
- Trim Warehouse Phase 1 - 5 Units (2.0 MMBtu/hr total)
- Trim Warehouse Phase 2 - ~~5~~ **7** Units (~~2.0~~ **2.8** MMBtu/hr total)
- Trim Warehouse Phase 3 - ~~5~~ **7** Units (~~2.0~~ **2.8** MMBtu/hr total)
~~- Body Warehouse - 3 Units (1.2 MMBtu/hr total)~~
~~- Body Service Warehouse - 3 Units (1.2 MMBtu/hr total)~~
- Stamping Warehouse 1 - 4 Units (1.6 MMBtu/hr total)
~~- Stamping Warehouse 2 - 1 Unit (0.4 MMBtu/hr total)~~
- Motor Pool Bldg. - ~~3~~ **5** Units (~~1.2~~ **2.0** MMBtu/hr total)
- Paint Coating Line ~~"~~C~~"~~ Heating and Cooling Units - ~~11~~ **10** units (~~8.8~~ **7.4** MMBtu/hr total)
- Paint Coating Line ~~"~~C~~"~~ Makeup Air Heating Units - 5 units (~~7.5~~ **8.1** MMBtu/hr total)
- Paint Coating Line ~~"~~C~~"~~ Air Handling Units - 2 units (~~7.7~~ **8.3** MMBtu/hr total)

(B) Heater Units - ~~39 Units~~
~~- Engine Assembly Expansion - 1 Unit (0.4 MMBtu/hr total)~~
- Engine Warehouse Expansion - ~~4~~ **2** Units (~~1.6~~ **0.8** MMBtu/hr total)
- Trim Warehouse Phase 1 - ~~2~~ **3** Units (~~0.8~~ **1.2** MMBtu/hr total)
- Trim Warehouse Phase 2 - ~~2~~ **3** Units (~~0.8~~ **1.2** MMBtu/hr total)
- Trim Warehouse Phase 3 - ~~2~~ **4** Units (~~0.8~~ **1.6** MMBtu/hr total)
- ~~Body Warehouse - 3 Units (1.20 MMBtu/hr total)~~
~~- Body Service Warehouse - 2 Units (0.8 MMBtu/hr total)~~
~~- Stamping Warehouse 1 - 3 Units (1.2 MMBtu/hr total)~~
~~- Stamping Warehouse 2 - 1 Unit (0.4 MMBtu/hr total)~~
- Motor Pool Accessary Bldg - 2 Units (0.8 MMBtu/hr total)
- Paint Coating Line **C** Heater Units - 17 units (6.8 MMBtu/hr total)

(C) Natural Gas-Fired Boiler:
One (1) spray booth boiler comprised of six (6) units with a maximum heat input rate of 1.25 MMBtu/hr each and a total maximum heat input rate of 7.5 MMBtu/hr.

(D) Emergency Equipment:

(1) One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (rated at 636 HP), permitted in 2016 for construction.

***

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 2-2]

(1) **(A)** One (1) Stamping Shop; and
(B) one (1) bumper injection machine approved in 2014 for installation within the existing building, required for the capacity increase to 450,000 vehicles per year, and

(2) Two (2) body lines within one (1) Body Shop with MIG and resistance welding robots, and one grinding booth, constructed in 1989 and approved for modification in 2012 and 2014 to expand the Body Shop Building to include a Parts Storage Area and Body Shop Processing Area including the following:

(~~i~~**A**) One (1) natural gas-fired air supply unit, with a maximum heat input capacity of 1.73 million British thermal units per hour (MMBtu/hr).

(~~ii~~**B**) MIG welding operations, with a maximum welding rod usage of 96,105 pounds per year.

~~(iii) One (1) bumper injection machine approved in 2014 for installation within the existing building, required for the capacity increase to 450,000 vehicles per year.~~

***

(f) Activities associated with emergencies, including the following:

Emergency generators as follows:

(1) Diesel generators not exceeding one thousand six hundred (1,600) horsepower.

(A) One 760 HP diesel fueled emergency engine, installed in 1989.

(2) Natural gas turbines or reciprocating engines not exceeding sixteen thousand (16,000) horsepower.

(A) One (1) 180 HP natural gas fired emergency engine, installed in 1997
(B) One (1) 225 HP natural gas fired emergency engine, installed in 2010

Stationary fire pump engines as follows:

(1) Two 375 HP diesel fired emergency fire pumps, installed in 1989.

***

SECTION D.1 ~~FACILITY~~ **EMISSIONS UNIT** OPERATION CONDITIONS
***

D.1.1 Prevention of Significant Deterioration (PSD) - Particulate Matter [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989; CP 157-4485-00050, issued September 13, 1995; CP 157-9619-00050, issued February 11, 1999 and PSD/SSM 157-29566-00050, issued on December 22, 2010 and PSD/SSM 157-33759-00050, the Permittee must adhere to the following conditions:

(a) The source (including, for purposes of this paragraph (a), paint coating line systems A/B and paint coating line system C) shall not produce greater than 450,000 vehicles per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The particulate (PM/PM10) emissions from PVC Coating Booth #1, PVC Coating Booth #2, Topcoat #1 Coating Booth, Topcoat #2 Coating Booth, Topcoat Booth #3, Intermediate (Surfacer) Coating Booth, PBL Paint Booth, Black Coat and Wax Booth, Anticorrosion Coating Booth, Touchup IPC Coating Booth, source-wide natural gas combustion **(excluding, for the purposes of this paragraph (b), those natural gas combustion units subject to Condition D.9.1(c) and the 4.8 MMBtu/hr natural gas-fired emergency generator)**, and all insignificant facilities that were permitted by the PSD (79) 1651 Revision at paint coating line systems A/B shall be limited to less than 23.1 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) The total natural gas combustion at the source (excluding, for purposes of this paragraph (c), those natural gas combustion units subject to Condition D.9.1(c) **and the 4.8 MMBtu/hr natural gas-fired emergency generator**) shall not exceed 2,380 million standard cubic feet per **twelve (**12**)** consecutive month period with compliance determined at the end of each month.

The NOx emissions from the source (excluding, for purposes of this paragraph (c), those natural gas combustion units subject to Condition D.9.1(c) and the 4.8 MMBtu/hr natural gas-fired emergency generator) shall not exceed 100 pounds per million cubic feet (lb/MMCF) of natural gas.

***

Compliance Determination Requirements**[326 IAC 2-7-5(1)]**

D.1.4 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

(b) Compliance with the particulate (PM/PM10) emission limit in Condition D.1.1(b) shall be determined by using the following equation, which calculates pounds of particulate emissions per month, and adding the result to the calculated particulate emissions from the previous eleven months:

Total Particulate Emissions (lb/month) = PVC ~~#1~~ Coating **Booth #1** PM/PM10 + PVC ~~#2~~ Coating **Booth #2** PM/PM10 + Topcoat #1 ~~Coating~~ **Booth** PM/PM10 + Topcoat #2 ~~Coating~~ **Booth** PM/PM10 + Topcoat #3 ~~Coating~~ **Booth** PM/PM10 + Intermediate (Surfacer) Coating **Booth** PM/PM10 + ~~Plastic Bumper Coating~~ **PBL Paint Booth** PM/PM10 + Black Coat and Wax ~~Coating~~ **Booth** PM/PM10 + Anticorrosion Coating Booth PM/PM10 + Touchup IPC Coating PM/PM10 + Natural Gas Combustion PM/PM10 + Insignificant PM/PM10 Sources
****

SECTION D.2 ~~FACILITY~~ **EMISSIONS UNIT** OPERATION CONDITIONS

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:

(e) Plastic Bumper Coating Line (PBL), identified as Unit 005, with a capacity of 60 units per hour, constructed in 1989 and modified in 2010:

(1) One (1) PBL **Paint** Booth, utilizing the air atomization and electrostatic bell methods of spraying, using a water wash as particulate matter control, and exhausting to four (4) stacks, identified as BPR-1, BPR-2, BPR-JR, and BPR-AP;

***

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

***

D.2.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2][326 IAC 8-1-6]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, 326 IAC 2-2-3, and 326 IAC 8-1-6, BACT for the Plastic Bumper Coating Line is the following:

(a) The daily VOC emissions from the PBL ~~Coating~~ **Paint** Booth shall not exceed 38.2 pounds of VOC per gallon of applied solids (4.57 kilograms of VOC per liter of applied solids). This limit applies to the weighted average of all plastics bumper

coatings. Compliance with this limit shall be demonstrated pursuant to Condition D.2.6.

***

D.2.2 Prevention of Significant Deterioration - Best Available Control Technology for Volatile Organic Compounds (VOC and Nitrogen Oxides (NOx) [326 IAC 2-2]

***

(c) The Permittee shall perform good combustion practices for the two (2) 2.5 MMBtu/hr PBL Flash Zone Heaters and utilize natural gas only for fuel.

Compliance with these limits and those contained in D.4.2, D.6.2, and D.8.2, shall satisfy the requirements of 326 IAC 2-2.

Compliance Determination Requirements**[326 IAC 2-7-5(1)]**

***

D.2.12 Water Wash Monitoring [40 CFR 64]

(a) Daily visual inspections shall be made on the water wash flood pans and water circulation associated with the PBL **Paint** Booth, exhausting to four (4) stacks, identified as BPR-1, BPR-2, BPR-JR and BRP-AP to verify the control system proper operation. A warning system shall be installed and operated to ensure that the water circulation pump is operational at all times when the PBL **Paint** Booth is in use. In addition, a red strobe light shall automatically be activated whenever the water circulation pump is down and once a day visual observation of the warning system shall be conducted. When a system warning is received, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) Semi-annual inspections shall be performed of the coating emissions from the PBL **Paint** Booth's stacks and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions or when evidence of overspray emission is observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

***

D.2.14 Reporting Requirements

A monthly summary of the daily VOC content of the coatings used, based on a volume weighted average from the PBL ~~Coating~~ **Paint** Booth, including the following information to document the compliance status with Condition D.2.1, shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35). The reports shall contain the following data for each operation, based on actual daily coating usage:

***

SECTION D.3 SOURCE OPERATION CONDITIONS

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:

~~Approved in 2014 for physical modification and operational changes as part of the proposed "2014 Project" for the plastic bumper coating operations. This will involve the following three (3) alternative operating scenarios for coating plastic bumper parts for Subaru vehicles:~~

~~Scenario #1 - involves the use of the following facilities to coat Subaru vehicles if cessation of production of the non-Subaru vehicles occurs before construction of proposed Paint Line C is complete:~~

~~Conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for 110,000 Subaru vehicles per year. The converted paint line will be renamed Unit 005B.~~

~~Use of existing Unit 005 with capacity of 250,000 units per year~~

~~Scenario #2 - involve increasing Unit 005B capacity from 110,000 to 250,000 units per year while not installing the Plastic Bumper Line in Paint Line "C".~~

~~Use of existing Unit 005 with capacity of 250,000 units per year~~

~~Scenario #3 - involve installing the Paint Line "C" Plastic Bumper Line, Unit 018 with a capacity of 160,000 units per year.~~

~~Use of existing Unit 005B (110,000 units per year) without increasing its capacity.~~

~~Use of the existing Unit 005 with capacity of 250,000 units per year~~

(g) One (1) plastic fascia paint line system**,** currently identified as PFPLS#2, **approved in 2014 for physical modification and operational change as part of the proposed "2014 Increase in Capacity Project" for the plastic bumper coating operations. This will involve conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for Subaru vehicles, with an increase in capacity from 110,000 to 250,000 vehicles per year. PFPLS#2** ~~to~~ **will** be renamed as Unit 005B, once production of non-Subaru vehicle ceases, which coats front and rear bumpers, and left and right side molding panels, with a maximum capacity of 150,118 units per year, constructed in 2006, and consisting of the following units:
***

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

***

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2] [326 IAC 8-1-6]

The annual VOC usage, including wiping/cleaning solvents, and solvent purging to the plastic fascia paint line (PFPLS#2), and natural gas usage from the combustion devices associated with this fascia paint line and **the 2.5 MMBtu/hr natural gas-fired dry off oven added to Topcoat #1 booth at the** existing Topcoat, Unit 003 ~~modification~~ shall be limited such that the total potential to emit does not exceed 102.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

***

(c) The VOC emissions from the combustion devices associated with the plastic fascia paint line and the **2.**5 MMBtu/hr natural gas-fired dry off oven added to the **Topcoat #1 booth at the** existing Topcoat, Unit 003 shall not exceed 5.5 pound per million cubic feet (lb/MMCF) of natural gas usage, and the total natural gas fuel usage shall not exceed 166.4 million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month.

***

D.3.1.1 Prevention of Significant Deterioration BACT [326 IAC 2-2] [326 IAC 8-1-6]

Pursuant to 326 IAC 2-2-3 Best Available Control Technology (PSD BACT), for Unit 005B once non-Subaru bumpers ceases production shall be the following:

(a) The VOC emissions from ~~Unit 018 of Section D.10(f) and~~ Unit 005B of this section, as a daily volume weighted average of all primer coatings used shall not exceed 0.71 pounds per gallon.

(b) The VOC emissions from ~~Unit 018 of Section D.10(f) and~~ Unit 005B of this section, as a daily volume weighted average of all basecoat coatings shall not exceed 1.38 pounds per gallon.

(c) The VOC emissions from ~~Unit 018 of Section D.10(f) and~~ Unit 005B of this section, as a daily volume weighted average of all clearcoat coatings shall not exceed 4.09 pounds per gallon.

***

Compliance with Conditions D.3.1.1(a) through (d) ~~and Condiiton D.10.2~~ shall satisfy the requirements of 326 IAC 2-2 and 326 IAC 8-1-6. This condition shall apply once non-Subaru bumpers cease production.

***

Compliance Determination Requirements **[326 IAC 2-7-5(1)]**

***

D.3.12 Record Keeping Requirements

(a) To document the compliance status with Conditions D.3.1 and D.3.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.3.1, and D.3.2. Records necessary to demonstrate the compliance status shall be available not later than 30 days after the end after each compliance period.

***

(5) Records of the natural gas fuel usage from the combustion units associated with the fascia paint line (PFPLS#2), and from the **2.**5 MMBtu/hr **natural gas fired dry-off oven** ~~heat flash~~ added to the existing Topcoat, Unit 003.

***

D.3.13 Reporting Requirements

A monthly summary of the VOC usage, including wiping/cleaning solvents, and solvent purging to the new plastic fascia paint line (PFPLS#2), and natural gas usage from the combustion devices associated with this fascia paint line and **the 2.5 MMBtu/hr natural gas fired dry-off oven added to Topcoat #1 booth at the** existing Topcoat, Unit 003 to document the compliance status with Condition D.3.1 shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

***

Section D.4 Changes:

SECTION D.4 ~~FACILITY~~ **EMISSIONS UNIT** OPERATION CONDITIONS

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:
***

(c) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, and modified in 2006, 2008, 2009, and 2010, consisting of the following units:

(1) One (1) Topcoat #1 Booth, **approved in 2016 to replace existing spray applicators with automated electrostatic bell type spray applicators**~~--utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, and automatic spray applicators~~, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of 5 MMBtu/hr;

***

(9) One (1) Topcoat #2 Oven, approved in 2013 for modification, with four (4) insignificant natural gas direct fired burners with a total maximum heat input capacity of 11.85 MMBtu/hr, using a 7.10 MMBtu/hr natural gas-fired regenerative thermal oxidizer (RTO-TC123) as VOC control, and exhausting to one (1) stack, identified as TC-2 Inc. (emissions from the entrance to and exit from the Topcoat #~~1~~**2** Oven are not controlled and exhaust to one (1) stack, identified as TC-2 Ex.). The oven is equipped with a purge exhaust stack;

***

~~(16) One (1) Wet Sand Repair direct fired Dryoff Oven, with one (1) insignificant natural gas-fired burner with a heat input capacity of 1.49 MMBtu/hr;~~

(1**6**~~7~~) One (1) Topcoat #3 Booth natural gas indirect fired flash zone heater between the base coat and clear coat zones with a heat input capacity of 2.5 MMBtu/hr, permitted in 2010 for construction; and

(1**7**~~8~~) Main paint mix room.

***

(d) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of **77** units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to include alterations to the conveyor system that will add storage capacity to allow more vehicles to be coated hourly, in subsequent operations consisting of the following units:

***

(2) One (1) Intermediate Coating Booth, utilizing, two (2) robots, for the application of anti-chip (ACC) ~~and stone guard (SGC)~~, two (2) manual air assisted spray guns for the application of primer on inner doors for certain colors, followed by the exterior robot e-stat painting process, using a water wash as particulate control, and exhausting to six (6) stacks, identified as SUR-2 through SUR-7;

***

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

***

D.4.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, PSD/SSM No. 157-29566-00050, 326 IAC 2-2-3, BACT for VOC for the facilities described in this section is the following:

(a) The daily VOC emissions from each facility shall be limited to less than the corresponding limits in the following table. Compliance with these limits shall be demonstrated pursuant to Condition D.4.9:

Facility	lb VOC/gal applied solids	kg VOC/liter applied solids
ED Body Coating Line (ED Dip/Rinse Tanks and Curing Oven)	0.40[a]	0.062[a]
Topcoat booths (Topcoat #1 Booth, Topcoat #2 Booth)	12.3[b]	1.47[b]
Topcoat **#3** Booth ~~#3~~	10.6[c]	1.27[c]
Intermediate Coating Booth	8.76[d]	1.05[d]

***

(c) The following good operating practices shall be observed to minimize VOC emissions from the Topcoat **#3** Booth ~~#3~~:
***

(f) The VOC emission**s** from the one (1) 2.5 MMBtu/hr Topcoat #3 flash zone heater shall be limited to less than 0.0055 pound per million British thermal units (lb/MMBtu).

***

D.4.2 Prevention of Significant Deterioration - Best Available Control Technology for Nitrogen Oxides (NOx) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for NOx for the natural gas combustion equipment described in this section is the following:

(a) NOx emissions from the following facilities:

(1) Shall be limited to less than 0.10 pounds per million Btu heat input for each facility listed as follows:
***
~~(Q) the insignificant Wet Sand Repair Dryoff Oven burner.~~
***

(b) All combustion operations listed above shall use low-NOx natural gas burners.

Compliance with these limitations, and those contained in Conditions D.2.2, ~~D.5.2,~~ D.6.2, and D.8.2, shall satisfy the requirements of 326 IAC 2-2.

Compliance Determination Requirements **[326 IAC 2-7-5(1)]**

***

D.4.9 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 2-2]

***

(c) Compliance with Condition D.4.1(b) the capture efficiency for the ED Coating Line shall be determined using the procedure in 40 CFR **Part 60,** Subpart MM – NSPS for Automobile and Light-Duty Truck Surface Coating Operations.

***

D.4.15 Water Wash Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

(a) Daily visual inspections shall be made on each water wash flood pans and water circulation associated with the Topcoat #1 Booth, exhausting to nine (9) stacks, identified as ~~TC1-1 through TC1-10~~ **TC1-1 through TC1-5 and TC1-7 through TC1-10**; Topcoat #2 Booth, exhausting to ten (10) stacks, identified as TC2-1 through TC2-10 and Topcoat #3 Booth, exhausting to five (5) stacks, identified as TUT-1 through TUT-5 to verify the control system proper operation. A warning system shall be installed and operated to ensure that the water circulation pump is operational at all times when any of the

following emission units are in operation: Topcoat #1 Booth, Topcoat #2 Booth, and Topcoat #3 Booth. In addition, a red strobe light shall automatically be activated whenever the water circulation pump is down and once a day visual observation of the warning system shall be conducted. When a system warning is received, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) Semi-annual inspections shall be performed of the coating emissions from the Topcoat #1 Booth stacks, identified as ~~TC1-1 through TC1-10~~ **TC1-1 through TC1-5 and TC1-7 through TC1-10**; Topcoat #2 Booth stacks, identified as TC2-1 through TC2-10 and Topcoat #3 Booth stacks, identified as TUT-1 through TUT-5 and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions or when evidence of overspray emission is observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.4.16 Record Keeping Requirements

(a) To document the compliance status with Conditions D.4.1, D.4.4, D.4.5, and D.4.6, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.4.1, D.4.4, D.4.5, and D.4.6, and the compliance determination requirements established in Condition D.4.9. Records necessary to demonstrate the compliance status shall be available ~~within~~ not later than 30 days after the end of each compliance period.

***

(d) To document the compliance status with Condition D.4.15, the Permittee shall maintain records of daily visual inspection of the water wash system, dates of any water wash warning system going off and corrective actions taken and log of semi-annual inspections of the Topcoat #1 Booth stacks, identified as ~~TC1-1 through TC1-10~~ **TC1-1 through TC1-5 and TC1-7 through TC1-10**; Topcoat #2 Booth stacks, identified as TC2-1 through TC2-10 and Topcoat #3 Booth stacks, identified as TUT-1 through TUT**.**

(e) To document the compliance status with Condition ~~D.4.1(g) and (h),~~ **D.4.1(f) and (g),** the Permittee shall maintain records of the vendor design guarantees for the one (1) 2.5 MMBtu/hr Topcoat #3 flash zone heater.

****

D.4.17 Reporting Requirements

A monthly summary of the daily VOC content of the coatings used from the ED Coating Line, Topcoat #1 Booth, Topcoat #2 Booth, Topcoat **#3** Booth ~~#3~~ and Intermediate Coating Booth, including the information to document the compliance status with Condition D.4.1 and a monthly summary of the monthly VOC usage to document the compliance status with Condition D.4.6, shall be both submitted to IDEM, OAQ not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.5 ~~FACILITY~~ **EMISSIONS UNIT** OPERATION CONDITIONS

****

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description:**

****

Compliance Determination Requirements **[326 IAC 2-7-5(1)]**

***

D.5.6 Reporting Requirements

A monthly summary of the daily VOC and coating usage from the Touchup IPC Booth to document the compliance status with Conditions D.5.1 and D.5.2, shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35). The reports shall contain the following data for each operation based on actual daily coating usage:

(1) Average coating VOC content in ~~kg VOC/liter~~ **lbs VOC/gal** coating minus water

(2) Coating usage in ~~liters~~ **gallons**.

***

SECTION D.6 ~~FACILITY~~ **EMISSIONS UNIT** OPERATION CONDITIONS

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:

***

(f) Anticorrosion Coating, identified as Unit 006, with a capacity of 77 units per hour, constructed in 1989 and modified in 2010. Approved in 2012 for modification to add two (2) spray coating systems at the Black Coat and Wax Booth to allow more vehicles coated hourly, including the following equipment:

(1) One (1) Black Coat and Wax Booth, utilizing the air atomized and air-assisted airless methods of spraying, using a dry filter as particulate matter control, exhausting to BCW Stack;

(2) One (1) Black **Coat** and Wax **Booth** ~~Coat~~ natural gas direct fired burner, with a heat input capacity of 24.0 MMBtu/hr;

***

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

***

D.6.1 Volatile Organic Compounds (VOC) Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989; PSD/SSM 157-29566-00050, issued on December 22, 2010 and 326 IAC 2-2-3, BACT for VOC for the facilities described in this section is the following:

(a) The daily VOC emissions from the Sealing and PVC Undercoating Line shall not exceed the corresponding limits in the following table. Compliance with these limits shall be determined pursuant to Condition D.6.~~7~~**8**:

***

(b) The daily VOC emissions from the Black and Wax Booth and the Anticorrosion Coating Booth shall not exceed the corresponding limits in the following table. Compliance with these limits shall be determined pursuant to Condition D.6.~~7~~**8**:

Facility	lb VOC/gal coating solids (lb/gcs)	kg VOC/liter coating solids (kg/lcs)
Before Vehicle Assembly		
Black **Coat** and Wax Booth (black	17.9	2.14

phthalic resin application)		
Black **Coat** and Wax Booth (inner panel wax application)	6.43	0.77
After Vehicle Assembly		
Anticorrosion Coating Booth (underfloor wax application)	3.59	0.43

(c) The following spray application methods must be used whenever applying the following coatings:
***
(3) Inner Panel Wax (in Black **Coat** and Wax Booth) - Air or Airless with minimum transfer efficiency of 80%
***

D.6.2 Prevention of Significant Deterioration - Best Available Control Technology for Nitrogen Oxides (NOx) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for NOx for the natural gas combustion facilities described in this section is the following:

(a) The NOx emissions from the PVC Coating Booths #1 and #2 Preheat Burners, the Black **Coat** and Wax Coat Booth burner, the two (2) insignificant PVC Seal Oven burners, ~~the two (2) insignificant natural gas fired burners,~~ and the insignificant Anticorrosion Booth burner shall not exceed 0.10 pounds per million Btu (lb/MMBtu) heat input each; and
***

D.6.3 Volatile Organic Compound (VOC) Best Available Control Technology Limitations [326 IAC 2-2] [326 IAC 8-2-9]

***
Compliance with these limits shall be determined pursuant to Condition **D.**6.8.
***

D.6.5 Particulate Emissions [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate emissions from the Black **Coat** and Wax Booth, PVC Coating Booth #1, PVC Coating Booth #2 and Anticorrosion Coating operations shall be controlled by dry filters. The Permittee shall operate the control devices in accordance with manufacturer's specifications.
***

Compliance Determination Requirements **[326 IAC 2-7-5(1)]**
***

D.6.9 Operator Training Program

The Permittee shall implement an operator training program.

(a) All operators that perform surface coating operations using spray equipment or booth maintenance shall be trained in the proper set-up and operation of the dry filters on the PVC **Coating** Booth #1, PVC **Coating** Booth #2, Black Coat and Wax **Booth** Coating operations and Anticorrosion Coating operations. All existing operators shall be trained upon permit issuance. All new operators shall be trained upon hiring or transfer.
***

D.6.10 Dry Filters Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

Dry filters shall be operated whenever the PVC Coating Booth #1 and PVC Coating Booth #2, Black **Coat** and Wax ~~coating~~ **Booth** and Anticorrosion Coating Booth are in operation and shall be maintained in accordance with manufacturer's specification. Filters shall be changed on a

monthly basis. Magnehelic pressure gauges shall be installed for continuous pressure monitoring and to detect whether filters need to be changed more frequently due to abnormal overspray loading. When the gauges indicate that a problem exists for a dry filter, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

***

D.6.12 Reporting Requirements

A monthly summary of the daily VOC content of the coatings used, based on a volume weighted average from the Sealing and **PVC** Undercoating Line and Anticorrosion Coating Booth to document the compliance status with Condition D.6.1, shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

****

Section D.7 Changes:

SECTION D.7 ~~FACILITY~~ **EMISSIONS UNIT** OPERATION CONDITIONS

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:

(i) Trim Line, identified as Unit 010, application in the Body Shop and Trim Shop of adhesives and sealers to various vehicle parts, constructed in 1989 and approved in 2012 for modification which includes increasing the line speed to allow more vehicles to be coated on an hourly basis and approved in 2014 to construct the following in order to accommodate production increase from 310,000 vehicles per year to 450,0000 vehicles per year:

(1) One (1) Wax **application line** ~~Booth~~ for the application of underbody wax.

(2) One (1) startup and roll test operation.

(3) Robotic applicators, permitted in 2016 for construction in the window installation area of Trim Line B, Unit 010 to allow for a new quarter glass side window for a new vehicle model.

(4) Approved in 2016 to include chemical compound trans-1,3,3,3-tetrafluoropropene in the air conditioning refrigerant for vehicles assembled on Trim Lines A and B.

***

D.7.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for VOC for the facilities described in this section is the following:

***

(b) The 15,000-gallon gasoline storage tank (one of ~~three~~ **six** tanks identified as 011) shall be equipped with:

***

D.7.4 Preventive Maintenance Plan [326 IAC 2-7-5(1~~3~~**2**)]

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their respective control devices.~~ **A Preventive Maintenance Plan, is required for these facilities and their respective control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

***

D.7.5 Record Keeping Requirements

***

(b) To ~~demonstrate~~ **document** the compliance status with Condition D.10.3, the Permittee shall maintain records in accordance with (1) and (2):

****

****

SECTION D.8 ~~FACILITY~~ **EMISSIONS UNIT** OPERATION CONDITIONS

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description:**

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(1) Six (6) general hot water boilers with a combined heat input capacity of 19.6 MMBtu/hr. [326 IAC 2-2] [326 IAC 6-2-4]

(2) Other insignificant natural gas combustion units: [326 IAC 2-2]

(A) Stamping Shop Steam Cleaner

(B) Distillation Room Heater

(C) Makeup Air Units (7)

(D) Unit Heaters (50)

(E) Door Heaters (14)

(F) Air Handling Units (4~~4~~**8**)

(G) Heating and Ventilation Units (6)

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment: [326 IAC 2-2]

(1) One (1) Stamping Shop; **(including new equipment installed in 2014 as part of the Expansion Project)**; and

(2) Two (2) body lines within one (1) Body Shop with MIG and resistance welding robots, and one (1) grinding booth constructed in 1989 and approved for modification in 2012 to expand the Body Shop Building to include a Parts Storage Area and Body Shop Processing Area including the following:

(i) One (1) natural gas-fired air supply unit, with a maximum heat input capacity of 1.73 million British thermal units per hour (MMBtu/hr); and

(ii) MIG welding operations, with a maximum welding rod usage of ~~33,000~~ **96,105** pounds per year

(c) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(d) Deburring; buffing; polishing; abrasive blasting activities; pneumatic conveying; and woodworking operations.

***

***

D.8.2 Prevention of Significant Deterioration - Best Available Control Technology for Nitrogen Oxides (NOx) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, and 326 IAC 2-2-3, BACT for NOx for the insignificant natural gas combustion equipment described in this section is the following:

(a) The NOx emissions from the following insignificant natural gas combustion facilities shall not exceed 0.10 pounds per million Btu (lb/MMBtu) heat input each:

***

(6) Air Handling Units (~~38~~**42** - does not include 6 air handling units in new engine manufacturing facility)

***

SECTION D.9 ~~FACILITY~~ **EMISSIONS UNIT** OPERATION CONDITIONS

Entire Paint Coating Line System "C" - 2014 Project, as described in Section D.10

***

D.9.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review; Requirements) and PSD 157-33759-00050, the BACT for the Paint Coating Line System "C" shall be the following:

(a) The total VOC emissions from the entire Paint Coating Line System "C" - 2014 project, including the PTE change from the modified existing emission units in Section D.5(h), and Section D.7(i) affected by this project shall be limited to less than 766.2 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The Paint Coating Line System "C" vehicle production shall be limited to 160,000 vehicles per twelve (12) consecutive month period, with compliance determined at the end of each month.

(c) The total natural gas combustion at the entire Paint Coating Line System "C" - 2014 project **(excluding the 4.8 MMBtu/hr natural gas-fired emergency generator)** shall be limited to less than 751 million standard cubic feet (MMCF) per twelve (12) consecutive month period, with compliance determined at the end of each month.

The NOx emissions from the natural gas combustion units at Paint Line System C shall not exceed 100 pounds per million cubic feet (lb/MMCF) of natural gas.

Compliance with this limitation, and those contained in Conditions D.5.1, D.7.2, D.10.1 shall satisfy the requirements of 326 IAC 2-2. Compliance with Condition D.10.2, shall satisfy the requirements of 326 IAC 2-2 and 326 IAC 8-1-6.

Compliance with D.9.1(c) shall limit NOx emissions to less than 40 tons per year and renders 326 IAC 2-2 not applicable.

D.9.2 PSD Minor Limitations for Particulate (PM, PM10, PM2.5) Emissions

The particulate (PM,PM10 and PM2.5) emissions from ED Coating, Unit 013, Sealing, LASD (Liquid Applied Sound Deadener Coating**) and PVC Coatings**, Unit 014, Intermediate Surfacer, Unit 015, Topcoat, Unit 016, Anticorrosion Coating (Trim and Final Assembly), Unit 017, Black and Wax Booth, Unit 017, ~~Plastic Bumper Coating, Unit 018,~~ Natural Gas Combustion units, at Paint Coating Line System C and PTE change from modified Plastic Bumper Booth 005B, Final

Repair, Unit 007, and modified Trim Line, Unit 010 at paint Line Coating Systems A/B shall be limited to less than 25 tons of PM per twelve consecutive month period, less than 15 tons of PM10 per twelve consecutive month period and less than 10 tons of PM2.5 per twelve consecutive month period

***

Compliance Determination Requirements **[326 IAC 2-7-5(1)]**

****

D.9.3 Volatile Organic Compounds (VOC), Particulate (PM, PM10, PM2.5) Emissions

(a) Compliance with the VOC emissions limit in Condition D.9.1~~(b)~~**(a)** shall be determined by using the following equation, which calculates tons of VOC emissions per month, and adding the result to the calculated VOC emissions from the previous eleven months:

Total VOC Emissions (ton/month) = ED Coating, Unit 013 VOC + Sealing, LASD (Liquid Applied Sound Deadener Coating) and **PVC Coatings**, Unit 014 VOC + Intermediate Surfacer, Unit 015 VOC + Topcoat, Unit 016 VOC + Anticorrosion Coating (Trim and Final Assembly)~~,~~ **and Black and Wax Booth,** Unit 017 VOC + ~~Black and Wax Booth, Unit 017 VOC+ Plastic Bumper Coating, Unit 018 VOC~~ + Purge Solvent and Capture, Unit 019 VOC + Miscellaneous Cleaning Solvents, Unit 020 VOC + Natural Gas Combustion VOC + Insignificant VOC Sources + VOC PTE change from modified Plastic Bumper Booth 005B, Final Repair, Unit 007, Trim Line, Unit 010, and Storage Tanks (i.e., Gasoline, Purge Thinner, Waste Purge, Vehicle Fluids), Unit 011

***

(b) Compliance with the particulate (PM, PM10, PM2.5) emission limits in Condition D.9.2 shall be determined by using the following equation, which calculates pounds of particulate emissions per month, and adding the result to the calculated particulate emissions from the previous eleven months:

Total Particulate Emissions (lb/month) = ED Coating, Unit 013 PM, PM10, PM2.5, Sealing, LASD (Liquid Applied Sound Deadener Coating**) and PVC Coatings**, Unit 014 PM, PM10, PM2.5, Intermediate Surfacer, Unit 015 PM, PM10, PM2.5, Topcoat, Unit 016 PM, PM10, PM2.5, Anticorrosion Coating (Trim and Final Assembly) **and Black and Wax Booth,** Unit 017 PM, PM10, PM2.5, ~~Black and Wax Booth, Unit 017 PM, PM10, PM2.5, Plastic Bumper Coating, Unit 018 PM, PM10, PM2.5,~~ Natural Gas Combustion units PM, PM10, PM2.5 at Paint Coating Line System C, and PTE change from modified Plastic Bumper Booth 005B, Final Repair, Unit 007, and Trim Line, Unit 010 at paint Line Coating Systems A/B

***

D.9.4 Record Keeping Requirements

(a) To document the compliance status with Conditions D.9.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish the compliance status with the VOC emission limit established in Condition D.9.1(a)~~, the natural gas combustion limit established in Conditions D.1.1(c) and D.1.2 and the VOC emission limit established in Condition D.1.3~~. Records necessary to demonstrate the compliance status shall be available not later than 30 days after the end of each compliance period.

D.9.5 Reporting Requirements

(a) Reports of monthly VOC emissions from the Paint Coating Line System ~~"~~C~~"~~ shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of the quarter being reported, to demonstrate the compliance status with Condition D.9.1(a).

***

Section D.10 Changes:

SECTION D.10 ~~FACILITY~~ **EMISSIONS UNIT** OPERATION CONDITIONS

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:

(a) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through 13-9, consisting of the following units:

(1) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, **comprised of six (6) units with a maximum heat input capacity of 1.3 million British thermal units per hour (MMBtu/hr) each and a total maximum heat input of 7.8 MMBtu/hr** ~~with a maximum heat input capacity of 12 million British thermal units per hour (MMBtu/hr).~~ **permitted in 2016 for construction.**

(2) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(3) One (1) ED Oven (pretreatment drying oven), with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(4) One (1) ED Body Cool Down Area.

(5) One (1) ED Deck and ED Sand Area.

(6) One (1) Paint Storage Room.

(7) One (1) Working Stage Air House **#1** to support the ~~Sealer, PVC, ED Sand, Wet Sand #2 Area rated at 9.5 MMBtu/hr~~ **Prep Deck and Offline Areas rated at 11.0 MMBtu/hr, permitted in 2016 for construction.**

(8) One (1) Working Stage Air House **RFH** to support the Surfacer Sand, Wet Sand #1 **and #2, ED Sand, Sealer and PVC** Area ~~rated at 2.6 MMBtu/hr~~ **with no heating components.**

(b) Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Line, identified as Unit 014, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 3 exhaust stacks, identified as Stacks 14-1 through 14-3, consisting of the following:

(1) One (1) PVC Coating Booth #1, equipped with airless spray application and pedestal

robotic spray system, using a dry filter to control the particulate overspray emissions.

(2) One (1) PVC Sealer Oven, with a maximum heat input capacity of ~~3~~ **3.5** MMBtu/hr, using no control, **permitted in 2016 for construction**.

(3) One (1) PVC Cool Down Area, using no controls.

(4) One (1) Sealer Application Area, using no controls.

(5) One (1) LASD (Liquid Applied Sound Deadener) Application Area, using no controls.

(c) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(1) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Intermediate Coating Oven, with a maximum heat input capacity of ~~10~~ **10.1** MMBtu/hr, with no VOC control, **permitted in 2016 for construction**.

(3) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at ~~3.0~~ **2.5** MMBtu/hr, **permitted in 2016 for construction**.

(4) One (1) Intermediate (Surfacer) Air House rated at ~~21.6~~ **26.5** MMBtu/hr **permitted in 2016 for construction**.

(5) One (1) Intermediate Cool Down Area, using no controls.

(6) One (1) main paint mix room.

(d) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-1 through 16-26, consisting of the following:

(1) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of ~~8.0~~ **7.6** MMBtu/hr, using a ~~1.0~~ **0.99** MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control, **permitted in 2016 for construction**.

(3) One (1) Topcoat natural gas-fired flash zone heater rated at ~~3.0~~ **2.5** MMBtu/hr. **permitted in 2016 for construction.**

(4) One (1) Topcoat #C1 Cool Down Area, using no controls.

(5) One (1) main paint mix room.

(6) One (1) Topcoat Air House rated at ~~38~~ **42.0** MMBtu/hr, **permitted in 2016 for construction**.

(7) One (1) **Paint** Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

(e) Anticorrosion Coating Operations, identified as Unit 017, with a capacity of ~~160,000 (if built as part of new paint Line "C") or~~ 225,000 units per year (~~if~~ **to be** built as part of existing paint lines ~~"A/B"~~ **A/B**), approved in 2014 for construction, venting to 2 exhaust stacks, identified as Stacks 17-1 and 17-2, consisting of the following units:

(1) One (1) Black and Wax Coating Booth, to be part of ~~either the new paint line "C" or~~ existing paint lines "A/B", equipped with air atomized and air-assisted airless spray systems, using a dry filter to control the particulate overspray emissions.

(2) One (1) Black and Wax Coating Booth natural gas-fired burner, with a maximum heat input capacity of ~~15.5~~ **13.7** MMBtu/hr, **permitted in 2016 for construction**.

(3) One (1) ~~Wax Coating Booth, constructed in~~ **2014 wax application line** in the Trim & Final Assembly Area~~, utilizing air-assisted spray system, with no particulate overspray control.~~

~~(4) One (1) Wax Coating Booth natural gas-fired burner, with a maximum heat input capacity 4.0 MMBtu/hr.~~

~~(f) Plastic Bumper Coating Line (PBL-C), identified as Unit 018, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 18 exhaust stacks, identified as Stacks 18-1 through 18-18, consisting of the following units (see operating scenarios for Unit 005B):~~

~~(1) One (1) PBL-C Paint Booth, equipped with air atomization and electrostatic bell spray systems, using dry filtration or a water wash system to control the particulate overspray emissions.~~

~~(2) One (1) PBL-C Oven, with a maximum heat input capacity of 3.0 MMBtu/hr, using no VOC controls.~~

~~(3) One (1) PBL-C Cool Down area.~~

~~(4) One (1) paint mixing room.~~

~~(5) Three (3) Bumper Air Houses (includes Primer Air House, basecoat Air house and Clearcoat Air House), rated at a total of 17.7 MMBtu/hr.~~

~~(6) One (1) PBL-C natural gas-fired flash zone heater located between the primer and basecoat zones rated at 3.0 MMBtu/hr.~~

~~(7) One (1) PBL-C natural gas-fired flash zone heater located between the basecoat and the clearcoat zones rated at 3.0 MMBtu/hr.~~

~~(8) One (1) Working Stage Air House rated at 4.4 MMBtu/hr.~~

~~(9) One (1) Mixing Air House located in Mixing Room rated at 1.8 MMBtu/hr.~~

(~~g~~**f**) Miscellaneous combustion devices, approved in ~~2014~~ **2016** for construction:

(1) One (1) Working Stage Air House **#2** used to support the Inspection, Touch-up area rated at ~~6.5~~ **11.0** MMBtu/hr.

(2) One (1) Working Stage Air House used to support Paint Coating Line ~~"C"~~ **C with no heating components.** ~~rated at 2.4 MMBtu/hr~~.

(~~h~~ **g**) Purge solvent usage and capture system, identified as Unit 019, approved in 2014 for

construction, designed to allow for purging and capturing of solvent and waterborne purge materials.

(~~i~~ **h**) Miscellaneous support cleaning operations, identified as Unit 020, approved in 2014 for construction, which include wiping solvent and miscellaneous cleanup materials.

(j **i**) An additional Startup and Roll Test Line, approved in 2014 for construction.

(~~k~~**j**) Engine assembly C -

(1) ~~o~~**O**ne (1) additional dynamometer gasoline engine testing, where engines are tested prior to installation in the vehicle chassis, approved in 2014 for construction.

(2) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

(~~l~~ **k**) Other insignificant natural gas combustion units approved in 2014 **and 2016** for construction:

(A) Rooftop Units - ~~53 Units~~
- Engine Assembly Expansion - 4 Units (1.6 MMBtu/hr total)
- Engine Warehouse Expansion - 2 Units (0.8 MMBtu/hr total)
- Trim Warehouse Phase 1 - 5 Units (2.0 MMBtu/hr total)
- Trim Warehouse Phase 2 - ~~5~~ **7** Units (~~2.0~~ **2.8** MMBtu/hr total)
- Trim Warehouse Phase 3 - ~~5~~ **7** Units (~~2.0~~ **2.8** MMBtu/hr total)
~~- Body Warehouse - 3 Units (1.2 MMBtu/hr total)~~
~~- Body Service Warehouse - 3 Units (1.2 MMBtu/hr total)~~
- Stamping Warehouse 1 - 4 Units (1.6 MMBtu/hr total)
~~- Stamping Warehouse 2 - 1 Unit (0.4 MMBtu/hr total)~~
- Motor Pool Bldg. - ~~3~~ **5** Units (~~1.2~~ **2.0** MMBtu/hr total)
- Paint Coating Line ~~"~~C~~"~~ Heating and Cooling Units - ~~11~~ **10** units (~~8.8~~ **7.4** MMBtu/hr total)
- Paint Coating Line ~~"~~C~~"~~ Makeup Air Heating Units - 5 units (~~7.5~~ **8.1** MMBtu/hr total)
- Paint Coating Line ~~"~~C~~"~~ Air Handling Units - 2 units (~~7.7~~ **8.3** MMBtu/hr total)

(B) Heater Units - ~~39 Units~~
~~- Engine Assembly Expansion - 1 Unit (0.4 MMBtu/hr total)~~
- Engine Warehouse Expansion - ~~4~~ **2** Units (~~1.6~~ **0.8** MMBtu/hr total)
- Trim Warehouse Phase 1 - ~~2~~ **3** Units (~~0.8~~ **1.2** MMBtu/hr total)
- Trim Warehouse Phase 2 - ~~2~~ **3** Units (~~0.8~~ **1.2** MMBtu/hr total)
- Trim Warehouse Phase 3 - ~~2~~ **4** Units (~~0.8~~ **1.6** MMBtu/hr total)
~~- Body Warehouse - 3 Units (1.20 MMBtu/hr total)~~
~~- Body Service Warehouse - 2 Units (0.8 MMBtu/hr total)~~
~~- Stamping Warehouse 1 - 3 Units (1.2 MMBtu/hr total)~~
~~- Stamping Warehouse 2 - 1 Unit (0.4 MMBtu/hr total)~~
- Motor Pool Accessary Bldg - 2 Units (0.8 MMBtu/hr total)
- Paint Coating Line ~~"~~C~~"~~ Heater Units - 17 units (6.8 MMBtu/hr total)

(C) Natural Gas-Fired Boiler:
One (1) spray booth boiler comprised of six (6) units with a maximum heat input rate of 1.25 MMBtu/hr each and a total maximum heat input rate of 7.5 MMBtu/hr.

(D) Emergency Equipment:
(1) One (1) natural gas-fired emergency boiler with a maximum heat input capacity of 4.8 MMBtu/hr (rated at 636 HP), permitted in 2016 for

construction.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3 (Control Technology Review; Requirements) and PSD 157-33759-00050, the BACT for VOC emissions from the following facilities in Paint Coating Line System "C" shall be the following:

(a) The VOC emissions from the ED Coating Line, identified as Unit 013 shall be limited to less than 1.15 pounds of VOC per gallon applied coating solids (lb/gacs), based on a daily volume weighted average, without add-on control.

(b) The VOC emissions from the Sealer, LASD and PVC Undercoating Line, identified as Unit 014 shall be limited to less than 0.38 pounds per gallon (lb/gal), based on a daily volume weighted average, without add-on control.

(c) When using Option A, the VOC emissions from the Intermediate Surfacer, identified as Unit 015, shall be limited to less than 4.8 pounds of VOC per gallon applied coating solids (lb/gacs), based on a daily volume weighted average, without add-on control.

(d) When using Option B, the combined VOC emissions from the Intermediate Surfacer, identified as Unit 015 and Topcoat, Unit 016 ("wet on wet" system), shall be limited to less than 10.41 pounds of VOC per gallon applied coating solids (lb/gacs), based on a daily volume weighted average, without add-on control.

(e) When using Option A, the VOC emissions from the Topcoat System #C1, identified as Unit 016, shall be limited to less than 10.96 pounds per gallon applied coating solids (lb/gacs), based on a daily volume weighted average.

(f) When using either Option A or Option B, the VOC emissions from the Topcoat System #C1 Oven, Unit 016 shall be vented to the thermal oxidizer (TO-C1) with destruction efficiency of 95% and a minimum capture efficiency of 18% (booth/oven split).

(g) The BACT for the Black and Wax Booth, Unit 017 shall be the following:

(1) The VOC emissions from the phthalic black material shall be limited to less than 1.0 pounds per gallon (lb/gal) based on a daily volume weighted average.

(2) The VOC emissions from the inner wax material shall be limited to less than 3.5 pounds per gallon (lb/gal) based on a daily volume weighted average.

(h) The VOC emissions from the Anticorrosion Wax Booth, Unit 017 shall be limited to less than 2.51 pounds per gallon (lbs/gal), based on a daily volume weighted average.

(i) The annual VOC usage for paint line cleaning/purge solvents minus the amount of VOC in the purge material collected associated with the Purge Solvent Usage and Capture System, Unit 019 shall be limited to less than 83.8 tons per twelve consecutive month period with compliance determined at the end of each month.

The annual VOC usage for wiping solvents and clean up materials shall be limited to less than 15.2 tons per twelve consecutive month period with compliance determined at the end of each month.

Good work practices shall be conducted for the Purge Solvent Usage and Capture System, Unit 019 and Solvent Wiping and Cleaning, Unit 020 which includes the following:

(1) Purge solvent capture systems shall be utilized each time that any coating application equipment is purged. The purge solvent capture systems shall have a minimum overall capture efficiency of at least eighty percent (80%). Collected purge solvent shall be retained in closed conveyances to the Permittee's spent purge solvent storage tank or in closed containers until such time as they are shipped offsite for disposal or recycling.

(2) Block painting will be utilized whenever possible to minimize color changes and the resulting purge.

(3) Clean up rags with solvent shall be stored in closed containers.

(4) Documentation shall be maintained on-site to demonstrate how these materials are being directed and collected for both the solvent-borne and water-borne purge material.

(j) The BACT for the following miscellaneous natural gas combustion units shall be the following:

(1) The VOC emissions from the ~~PBL-C Oven~~, Working Stage Air House and Mixing Air House shall each be limited to less than 0.0054 pound per million British thermal units (lb/MMBtu) and shall only combust natural gas.

(2) The VOC emissions from the Rooftop and Heater Units not mentioned in condition D.10.1(k) shall each be limited to less than 0.0054 pound per million British thermal units (lb/MMBtu) and shall only combust natural gas.

(k) The PSD BACT for the following miscellaneous natural gas combustion units shall be the following:

Combustion Emission Unit/ID	**number of Units**	**Heat Input (MMBtu/hr)**
PAINT SHOP "C" NATURAL GAS COMBUSTION UNITS		
Pretreatment Boiler – Ed Body Area	~~1~~ **6**	~~12~~ **7.8 total**
ED Oven	1	9.0
PVC Sealer Oven	1	~~3.0~~ **3.5**
Intermediate (Surfacer) Oven	1	~~10~~ **10.1**
Intermediate (Surfacer) Flash Zone Heater	1	~~3.0~~ **2.5**
~~PBL-C Flash Zone Heater – Primer & Basecoat Zones~~	~~1~~	~~3.0~~
Topcoat Flash Zone Heater	1	~~3.0~~ **2.5**

Combustion Emission Unit/ID	number of Units	Heat Input (MMBtu/hr)
~~PBL-C Flash Zone Heater – Basecoat &Clearcoat Zones~~	~~1~~	~~3.0~~
Topcoat #C1 Oven	1	~~8.0~~ **7.6**
Topcoat Oven RTO	1	~~1.0~~ **0.99**
Intermediate (Surfacer) Air Houses	1	~~21.6~~ **26.5**
Topcoat Air House	1	~~38~~ **42.0**
~~Working Stage Air House - Surfacer Sand, Wet Sand #1~~	~~1~~	~~2.6~~
Working Stage Air House #1-**Prep Deck , Offline Areas** ~~Sealer, PVC, ED Sand, Wet Sand #2~~	1	~~9.5~~ **11.0**
Black **Coat** & Wax Booth	1	~~15.5~~ **13.7**
Spray Booth Boilers	**6**	**7.5 total**
Paint Mixing Air House- ~~Mix Room~~ **Body**	1	2.0
Working Stage Air House **#2** - Inspection, Touch-Up Area	1	~~6.5~~ **11.0**
~~Working Stage Air House- Paint Shop C~~	~~1~~	~~2.4~~
NEW ROOFTOP UNITS		
Heating and Cooling Units		
HCU-14-1 Pretreatment Roof	1	~~0.77~~ **0.8337**
HCU-14-2 Pretreatment Roof	1	~~0.77~~ **0.8337**
HCU-14-3 Pretreatment Roof	1	~~0.77~~ **0.8337**
HCU-14-4 Pretreatment Roof	1	~~0.77~~ **0.8337**
HCU-14-5 Pretreatment Roof	1	~~0.77~~ **0.8337**
HCU-14-6 Pretreatment Roof	1	~~0.77~~ **0.8337**
~~HCU-10 Oven Roof~~	~~1~~	~~0.591~~
HCU-11 Oven Roof	1	~~0.591~~ **0.8**
HCU-12 Cafeteria	1	~~0.591~~ **0.8**
HCU-13 Roof of Conveyor Bridge	1	~~1.175~~ **0.4**
HCU-14 Roof of Conveyor Bridge	1	~~.175~~ **0.4**
Makeup Air heating Units		
MAU-14-1 Roof **Oven Area**	1	~~1.5~~ **1.62**
MAU-14-2 Roof **Oven Area**	1	~~1.5~~ **1.62**

Combustion Emission Unit/ID	number of Units	Heat Input (MMBtu/hr)
MAU-14-3 Roof **Oven Area**	1	~~1.5~~ **1.62**
MAU-14-4 Roof **Wastewater**	1	~~1.5~~ **1.62**
MAU-14-5 Roof **Paint Sludge**	1	~~1.5~~ **1.62**
AIR HANDLING UNITS		
AHU-14-1 Penthouse	1	~~3.834~~ **4.167**
AHU-14-2 Penthouse	1	~~.834~~ **4.167**
NEW HEATER UNITS		
Unit-14-1 Oven-A4-B0	1	0.4
UH-14-2 Oven - A2 - B1.5	1	0.4
UH-14-3 Oven - A2 - B3	1	0.4
UH-14-9 Penthouse - A9 - B2	1	0.4
UH-14-10 Penthouse - A17 - B3	1	0.4
UH-14-11 Penthouse - A12.5 - B0	1	0.4
UH-14-12 Penthouse - A15 - B0	1	0.4
UH-14-13 Penthouse - A17 - B1	1	0.4
UH-14-20 North Dock - A15 - B6	1	0.4
UH-14-21 North Dock - A15 - B6	1	0.4
UH-14-22 WWT - A4.5 - B6	1	0.4
UH-14-23 WWT - A2 - B7	1	0.4
~~UH-14-24 Tunnel - X19.4 - Y4~~ **UH-9A Conveyor Bridge**	1	0.4
~~UH-14-25 Tunnel - X24 - Y5.2~~ **UH-10-01 Conveyor Bridge**	1	0.4
~~UH-14-26 Tunnel - X18 - Y6.6~~ **UH-9-15 Conveyor Bridge**	1	0.4
~~UH-14-27 Tunnel - X18 - Y10.8~~ **UH-9-16 Conveyor Bridge**	1	0.4
~~UH-14-28 Tunnel - X18.5 - Y14.5~~ **UH-5-01 Conveyor Bridge**	1	0.4

(1) The VOC emissions from the combustion units in the above table shall each be limited to less than 0.005 pound per million British thermal units (lb/MMBtu).

(2) The combustion of only natural gas fuel; and

(3) **Use of ~~G~~g**ood combustion practices, which includes proper care and maintenance of the natural gas burner systems.

(l) The Permittee shall observe good work practices when testing engines and during startup and roll test of the vehicles by minimizing excessive testing of the vehicle powertrain outside the normal testing specification ranges, (i.e. speed, duration and distance during the test).

(m) The BACT for the 4.8 MMBtu/hr (636 HP) emergency generator shall be the following:

(1) The VOC emissions from the 4.8 MMBtu/hr (636 HP) emergency generator shall be limited to 1 g/HP-hr (0.0022 lb/HP-hr (1.4 lbs/hr)).

(2) The emergency generator shall only combust natural gas for fuel; and

(3) Use of good combustion practices, which includes proper care and maintenance of the natural gas burner systems.

Compliance with Condition D.10.1 shall satisfy the requirements of 326 IAC 2-2.

D.10.2 **Reserved**~~Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2] [326 IAC 8-1-6]~~

~~Pursuant to 326 IAC 2-2-3 (Control Technology Review; Requirements) and PSD 157-33759-00050, the BACT for VOC emissions from the Paint Coating Line System "C" Plastic Bumper Coating Line (PBL-C), Unit 018 shall be the following:~~

~~(a) The VOC emissions from Unit 005B of Section D.3(g) and Unit 018 of this section, as a volume weighted average of all primer coatings used, shall be limited to less than 0.71 pounds per gallon based on a daily volume weighted average.~~

~~(b) The VOC emissions from Unit 005B of Section D.3(g) and Unit 018 of this section, as a volume weighted average of all basecoat coatings, shall be limited to less than 1.38 pounds per gallon, based on a daily volume weighted average.~~

~~(c) The VOC emissions from Unit 005B of Section D.3(g) and Unit 018 of this section, as a volume weighted average of all clearcoat coatings, shall be limited to less than 4.09 pounds per gallon, based on a daily volume weighted average.~~

~~(d) Good work practices which includes the following:~~

~~(1) The use of robotic automatic spray applicators to minimize paint usage.~~

~~(2) The use of waterbased coatings for the primer, and basecoat applications.~~

~~(3) All paint mixing containers, other than day tanks equipped with continuous agitation systems, which contain organic VOC containing coatings and other materials shall have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.~~

~~(4) Solvent-borne purge materials sprayed during paint line cleaning and color changes shall be directed into solvent collection containers. Documentation shall be maintained on-site to demonstrate how these materials are being directed and collected for both the solvent-borne and water-borne purge materials.~~

~~(5) Solvent collection containers shall be kept closed when not in use.~~

~~(6) Clean-up rags with solvent shall be stored in closed containers.~~

~~(7) VOC emissions shall be minimized during cleaning of storage, mixing, and conveying equipment.~~

~~Compliance with Condition D.10.2 shall satisfy the requirements of 326 IAC 2-2 and 326 IAC 8-1-6.~~***

D.10.5 Particulate Emissions from Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 3~~16~~**26** IAC 6-2-4, the particulate emissions from the Pretreatment and ED Boiler shall each not exceed 0.284 pound per million British thermal units (lb/MMBtu).

The limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. (Q = ~~176.1~~ **176.6** MMBtu/hr).

D.10.6 Particulate Emissions [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate emissions from the Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Booth identified as Unit 014; Intermediate Coating Booth, identified as Unit 015; Topcoat #C1 Booth identified as Unit 016; Black and Wax Coating Booth identified as Unit 017 ~~and PBL-C Paint Booth~~ shall be controlled by dry filters or water wash system or equivalent control. The Permittee shall operate the control devices in accordance with manufacturer's specifications.

***

Compliance Determination Requirements **[326 IAC 2-7-5(1)]**

***

D.10.8 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

(a) Compliance with the VOC emission limits in Condition~~s~~ D.10.1 ~~and D.10.2~~ shall be determined with the following equations (as applicable):

***

(b) Compliance with the VOC limit in Condition D.10.1(i) shall be determined by using the following equation, which calculates the tons of VOC emissions per month, and adding the result to the calculated VOC emissions from the previous eleven months:

***

D.10.9 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

(a) Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the thermal oxidizer, TO-C1 at all times the Topcoat #C1 Oven is in operation to ensure compliance with Conditions D.10.1(d) and (e).

***

D.10.13 Water Wash Monitoring [326 IAC 2-7-5(3)]

Daily visual inspections shall be made on each water wash flood pans and water circulation associated with the Topcoat #C1 Booth, exhausting to twenty-six (26) exhaust stacks, identified as Stacks 16-1 through 16-26, ~~the PBL-C Paint Booth exhausting to eighteen (18) exhaust stacks, identified as Stacks 18-1 through 18-18,~~ and Intermediate Coating Booth, exhausting to fourteen (14) exhaust stacks identified as Stacks 15-1 through 15-14, to verify the control system proper operation. A warning system shall be installed and operated to ensure that the water circulation pump is operational at all times when the Topcoat #C1 Booth ~~and PBL-C Paint Booth~~ is in operation. In addition, a red strobe light shall automatically be activated whenever the water circulation pump is down and once a day visual observation of the warning system shall be

conducted. When a system warning is received, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this **permit.**

D.10.15 Record Keeping Requirements

(a) To document the compliance status with Conditions D.10.1(a) through (h), ~~D.10.2 through~~ **D.10.3, and** D.10.4, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.10.1 through D.10.4. Records necessary to demonstrate compliance shall be available not later than 30 days after the end of each compliance period.

***

(b) To document the compliance status with Condition D.10.1(i), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.10.1(i). Records necessary to demonstrate compliance shall be available not later than 30 days after the end of each compliance period.

***

(c) To document the compliance status with Condition D.10.1(j), the Permittee shall maintain on file vendors guarantees and/or certifications for VOC emissions from the miscellaneous combustion sources.

***

D.10.16 Reporting Requirements

A monthly summary of the information to document the compliance status with Condition D.10.1 ~~and D.10.2~~ shall be submitted to IDEM, OAQ using the reporting forms located at the end of this permit or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

Section E.1 Changes:

IDEM added Condition E.1.5 Testing Requirements to document the compliance status with Condition E.1.4.

SECTION E.1 ~~FACILITY OPERATION CONDITIONS~~ **NESHAP**

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:

***

(c) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, and modified in 2006, 2009 and 2010, consisting of the following units:

(1) One (1) Topcoat #1 Booth, **approved in 2016 to replace existing spray applicators with automated electrostatic bell type spray applicators**--~~utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, and automatic spray applicators~~, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of 5 MMBtu/hr;

~~Approved in 2014 for physical modification and operational change as part of the proposed "2014 Increase in Capacity Project" for the plastic bumper coating operations. This will involve the following three (3) alternative operating scenarios for coating plastic bumper parts for Subaru vehicles:~~

~~Scenario #1 - involves the use of the following facilities to coat Subaru vehicles once cessation of production of the non-Subaru vehicle were to occur before construction of proposed Paint Line C is complete:~~

~~Conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for 110,000 Subaru vehicles per year. The converted paint line will be renamed Unit 005B.~~

~~Use of existing Unit 005 with capacity of 250,000 units per year~~

~~Scenario #2 - involve increasing Unit 005B capacity from 110,000 to 250,000 units per year while not installing the Plastic Bumper Line, Unit 018 in Paint Line "C".~~

~~Use of existing Unit 005 with capacity of 250,000 units per year~~

~~Scenario #3 - involve installing the Paint Line "C" Plastic Bumper Line, Unit 018 with a capacity of 160,000 units per year.~~

~~Use of existing Unit 005B (110,000 units per year) without increasing its capacity.~~

~~Use of the existing Unit 005 with capacity of 250,000 units per year~~

(g) One (1) plastic fascia paint line system**,** currently identified as PFPLS#2, **approved in 2014 for physical modification and operational change as part of the proposed "2014 Increase in Capacity Project" for the plastic bumper coating operations. This will involve conversion of the existing non-Subaru vehicle Plastic Fascia Paint Line System (PFPLS#2) to the production of painted plastic bumpers for Subaru vehicles, with an increase in capacity from 110,000 to 250,000 vehicles per year. PFPLS#2** ~~to~~ **will** be renamed as Unit 005B (if non-Subaru vehicle production ceases), which coats front and rear bumpers, and left and right side molding panels with a maximum capacity of 150,118 units per year, constructed in 2006, consisting of the following units:

(h) Final Repair (Touchup) painting, identified as Unit 007, constructed in 1989 and approved in 2014 to increase capacity from 10 units per hour to 15 units per hour including the following::

(1) One (1) Touchup IPC Booth, located in the In-Process Control area, utilizing the air atomization method of spraying;

~~(h)~~**(i)** Trim Line, identified as Unit 010, application in the Body Shop and Trim Shop of adhesives and sealers to various vehicle parts, constructed in 1989 and approved in 2012 for modification which includes increasing the line speed to allow more vehicles to be coated on an hourly basis and approved in 2014 for modification in order to accommodate a production increase from 310,000 vehicles per year to 450,000 vehicles per year:

(1) One (1) Wax Booth for the application of underbody wax.

***

(3) Robotic applicators, permitted in 2016 for construction in the window installation area of Trim Line B, Unit 010 to allow for a new quarter glass side window for a

new vehicle model.

***

~~(i)~~**(j)** Six (6) storage tanks, identified collectively as Unit 011, which includes the following equipment:

(1) Gasoline storage tank, with a capacity of 15,000 gallons, constructed in 1988, using a certified vapor collection and control system;

(2) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 1988, using a certified vapor collection and control system; and

(3) Waste purge thinner storage tank, with a capacity of 6,000 gallons, constructed in 1992.

(4) Purge thinner storage tank, with a capacity of 5,000 gallons, constructed in 2005;

(5) Windshield washer fluid storage tank, with a capacity of 5,000 gallons, constructed in 1988;

(6) Gasoline storage tank, with a capacity of 1,500 gallons, installed in 2004; and

~~(j)~~**(k)** Purge solvent usage and capture system, identified as Unit 012, constructed in 1989 and modified in 2006 and 2010 to allow for purging and capturing of solvent and waterborne purge materials.

Paint Coating Line System ~~"~~C~~"~~

(a) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through 13-9, consisting of the following units:

(1) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, **comprised of six (6) units with a maximum heat input capacity of 1.3 million British thermal units per hour (MMBtu/hr) each and a total maximum heat input of 7.8 MMBtu/hr** ~~with a maximum heat input capacity of 12 million British thermal units per hour (MMBtu/hr)~~ **permitted in 2016 for construction**~~.~~

(2) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(3) One (1) ED Oven (pretreatment drying oven, with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(4) One (1) ED Body Cool Down Area.

(5) One (1) ED Deck and ED Sand Area.

(6) One (1) Paint Storage Room.

(7) One (1) Working Stage Air House **#1** to support the ~~Sealer, PVC, ED Sand, Wet Sand #2 Area rated at 9.5 MMBtu/hr~~ **Prep Deck and Offline Areas rated at 11.0 MMBtu/hr permitted in 2016 for construction.**

(8) One (1) Working Stage Air House **RFH** to support the Surfacer Sand, Wet Sand #1 **and #2, ED Sand, Sealer and PVC** Area ~~rated at 2.6 MMBtu/hr~~ **with no heating components.**

(b) Sealing, LASD (Liquid Applied Sound Deadener) and PVC Undercoating Line, identified as Unit

014, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 3 exhaust stacks, identified as Stacks 14-1 through 14-3, consisting of the following:

(1) One (1) PVC Coating Booth #1, equipped with airless spray application and pedestal robotic spray system, using a dry filter to control the particulate overspray emissions.

(2) One (1) PVC Sealer Oven, with a maximum heat input capacity of ~~3~~ **3.5** MMBtu/hr, using no control, **permitted in 2016 for construction**.

(3) One (1) PVC Cool Down Area, using no controls.

(4) One (1) Sealer Application Area, using no controls.

(5) One (1) LASD (Liquid Applied Sound Deadener) Application Area, using no controls.

(c) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(1) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Intermediate Coating Oven, with a maximum heat input capacity of ~~10~~ **10.1** MMBtu/hr, with no VOC control, **permitted in 2016 for construction**.

(3) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at ~~3.0~~ **2.5** MMBtu/hr, **permitted in 2016 for construction**.

(4) One (1) Intermediate (Surfacer) Air House rated at ~~21.6~~ **26.5** MMBtu/hr **permitted in 2016 for construction**.

(5) One (1) Intermediate Cool Down Area, using no controls.

(6) One (1) main paint mix room.

(d) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-1 through 16-26, consisting of the following

(1) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of ~~8.0~~ **7.6** MMBtu/hr, using a ~~1.0~~ **0.99** MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control **permitted in 2016 for construction**.

(3) One (1) Topcoat natural gas-fired flash zone heater rated at ~~3.0~~ **2.5** MMBtu/hr **permitted in 2016 for construction**.

(4) One (1) Topcoat #C1 Cool Down Area, using no controls.

(5) One (1) main paint mix room.

(6) One (1) Topcoat Air House rated at ~~38~~ **42.0**MMBtu/hr**, permitted in 2016 for construction**

(7) One (1) **Pain**t Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

Anticorrosion Coating Operations , identified as Unit 017, with a capacity of ~~160,000 (if built as part of new paint Line **C**) or~~ 225,000 units per year (~~if~~ **to be** built as part of existing paint lines ~~"A/B"~~ **A/B**), approved in 2014 for construction, venting to 2 exhaust stacks, identified as Stacks 17-1 through 17-2**,** consisting of the following units:

(1) One (1) Black and Wax Coating Booth, to be part ~~of either the new paint line or~~ existing paint lines ~~"A/B"~~ **A/B**, equipped with air atomized and air-assisted airless spray systems, using a dry filter to control the particulate overspray emissions.

(2) One (1) Black and Wax Coating Booth natural gas-fired burner, with a maximum heat input capacity of ~~15.5~~ **13.7** MMBtu/hr, **permitted in 2016 for construction**.

(3) One (1) ~~Wax Coating Booth, constructed in 2014~~ **wax application line** in the Trim & Final Assembly Area, ~~utilizing air-assisted spray system, with no particulate overspray control.~~

~~(f) Plastic Bumper Coating Line (PBL-C), identified as Unit 018, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 18 exhaust stacks, identified as Stacks 18-1 through 18-18, consisting of the following units:~~

~~(1) One (1) PBL-C Paint Booth, equipped with air atomization and electrostatic bell spray systems, using dry filtration or a water wash system to control the particulate overspray emissions.~~

~~(2) One (1) PBL-C Oven, with a maximum heat input capacity of 3.0 MMBtu/hr, using no VOC controls.~~

~~(3) One (1) PBL-C Cool Down area.~~

~~(4) One (1) paint mixing room.~~

~~(5) Three (3) Bumper Air Houses (includes Primer Air House, basecoat Air house and Clearcoat Air House), rated at a total of 17.7 MMBtu/hr.~~

~~(6) One (1) PBL-C natural gas-fired flash zone heater located between the primer and basecoat zones rated at 3.0 MMBtu/hr.~~

~~(7) One PBL-C natural gas-fired flash zone heater located between the basecoat and the clearcoat zones rated at 3.0 MMBtu/hr.~~

~~(8) One (1) Working Stage Air House rated at 4.4 MMBtu/hr.~~

~~(9) One (1) Mixing Air House located in Mixing Room rated at 1.8 MMBtu/hr.~~

(~~g~~**f**) Miscellaneous combustion devices, approved in ~~2014~~ **2016** for construction:

(1) One (1) Working Stage Air House **#2** used to support the Inspection, Touch-up area rated at ~~6.5~~ **11.0** MMBtu/hr.

SECTION E.1 ~~FACILITY OPERATION CONDITIONS~~ **NESHAP**

(2) One (1) Working Stage Air House used to support Paint Coating Line ~~"~~C~~"~~ **with no heating components.** ~~rated at 2.4 MMBtu/hr~~.

(~~h~~**g**) Purge solvent usage and capture system, identified as Unit 019, designed to allow for purging and capturing of solvent and waterborne purge materials.

(~~i~~**h**) Miscellaneous support cleaning operations, identified as Unit 020, which include wiping solvent and miscellaneous cleanup materials.

(~~j~~**i**) An additional Startup and Roll Test Line, approved in 2014 for construction.

(~~k~~**j**) Engine assembly -

(1) **O**~~o~~ne (1) additional dynamometer gasoline engine testing, where engines are tested prior to installation in the vehicle chassis, approved in 2014 for construction.

(2) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]
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Compliance Determination Requirements [326 IAC 2-7-5(1)]

E.1.5 Testing Requirements [326IAC 2-1.1-11] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In order to document the compliance status with Condition E.1.4, the Permittee shall perform the testing required under 40 CFR Part 63, Subpart IIII, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
***

Section E.2 Changes:

IDEM added Condition E.2.3 Testing Requirements to document the compliance status with Condition E.2.2.

SECTION E.2 ~~FACILITY OPERATION CONDITIONS~~**NSPS**

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:

***

(c) Topcoat System, identified as Unit 003, with a capacity of 77 units per hour, constructed in 1989, and modified in 2006, 2009 and 2010, consisting of the following units:

(1) One (1) Topcoat #1 Booth, **approved in 2016 to replace existing spray applicators with automated electrostatic bell type spray applicators**--~~utilizing air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot methods of application, and automatic spray applicators~~, using a water wash as particulate matter control, and exhausting to nine (9) stacks, identified as TC1-1 through TC1-5 and TC1-7 through TC1-10. One (1) natural gas-fired dry off oven, between the basecoat and clearcoat zones, with a heat input capacity of 5 MMBtu/hr;

***

Paint Coating Line System ~~"~~C~~"~~

(a) Electrodeposition (ED) Coating Line for Vehicle Bodies, identified as Unit 013, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 9 exhaust stacks, identified as Stacks 13-1 through13-9, consisting of the following units:

(1) One (1) ED Body Pretreatment Area, including pretreatment boiler for warming water surrounding the ED Coating Tank, **comprised of six (6) units with a maximum heat input capacity of 1.3 million British thermal units per hour (MMBtu/hr) each and a total maximum heat input of 7.8 MMBtu/hr** ~~with a maximum heat input capacity of 12 million British thermal units per hour (MMBtu/hr).).~~ **permitted in 2016 for construction.**

(2) One (1) ED Body Coating Tank, utilizing dipping as the method of application.

(3) One (1) ED Oven (pretreatment drying oven, with a maximum heat input capacity of 9.0 MMBtu/hr, using no controls.

(4) One (1) ED Body Cool Down Area.

(5) One (1) ED Deck and ED Sand Area.

(6) One (1) Paint Storage Room.

(7) One (1) Working Stage Air House **#1** to support the ~~Sealer, PVC, ED Sand, Wet Sand #2 Area rated at 9.5 MMBtu/hr~~ **Prep Deck and Offline Areas rated at 11.0 MMBtu/hr, permitted in 2016 for construction.**

(8) One (1) Working Stage Air House **RFH** to support the Surfacer Sand, Wet Sand #1 **and #2, ED Sand, Sealer and PVC** Area ~~rated at 2.6 MMBtu/hr~~ **with no heating components**.

(d) Intermediate Surfacer Coating Line, identified as Unit 015, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 14 exhaust stacks identified as Stacks 15-1 through 15-14, consisting of the following:

(1) One (1) Intermediate Coating Booth, equipped with manual/robotic/automated spray applicators, for the application of waterborne surfacer material, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Intermediate Coating Oven, with a maximum heat input capacity of ~~10~~ **10.1** MMBtu/hr, with no VOC control, **permitted in 2016 for construction**.

(3) One (1) Intermediate (Surfacer) natural gas-fired flash zone heater rated at ~~3.0~~ **2.5**MMBtu/hr, **permitted in 2016 for construction**.

(4) One (1) Intermediate (Surfacer) Air House rated at ~~21.6~~ **26.5** MMBtu/hr. **permitted in 2016 for construction.**

(5) One (1) Intermediate Cool Down Area, using no controls.

(6) One (1) main paint mix room.

(d) Topcoat System, identified as Unit 016, with a capacity of 160,000 units per year, approved in 2014 for construction, venting to 26 exhaust stacks, identified as Stacks 16-

SECTION E.2 ~~FACILITY OPERATION CONDITIONS~~**NSPS**

1 through 16-26, consisting of the following

(1) One (1) Topcoat #C1 Booth, equipped with air atomized spray with robot, electrostatic air atomized spray with robot, and electrostatic bell with robot method of applications, and automatic spray applicators, using dry filtration or a water wash system to control the particulate overspray emissions.

(2) One (1) Topcoat #C1 Oven, with a maximum heat input capacity of ~~8.0~~ **7.6** MMBtu/hr, using a ~~1.0~~ **0.99** MMBtu/hr natural gas-fired thermal oxidizer (TO-C1) as VOC control, **permitted in 2016 for construction**.

(3) One (1) Topcoat natural gas-fired flash zone heater rated at ~~3.0~~ **2.5** MMBtu/hr, **permitted in 2016 for construction**.

(4) One (1) Topcoat #C1 Cool Down Area, using no controls.

(5) One (1) main paint mix room.

(6) One (1) Topcoat Air House rated at ~~38~~ **42.0** MMBtu/hr, **permitted in 2016 for construction**.

(7) One (1) **Paint** Mixing Air House located in Mix Room rated at 2.0 MMBtu/hr.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]
****

E.2.1 General Provisions Relating to NSPS MM [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - ~~(Attachment B)~~ General Provisions, which are incorporated as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 60, Subpart MM.

E.2.2 Automobiles and Light-Duty Trucks NSPS [40 CFR Part 60, Subpart MM]

The Permittee ~~which engages in automobiles and light-duty trucks production~~ shall comply with the **following** provisions of 40 CFR Part 60, Subpart MM **(included as Attachment A of the operating permit), which are incorporated by reference as 326 IAC 12-1, for the units listed above**~~, as follows~~:

Compliance Determination Requirements [326 IAC 2-7-5(1)]

E.2.3 Testing Requirements [326IAC 2-1.1-11] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In order to document the compliance status with Condition E.2.2, the Permittee shall perform the testing required under 40 CFR Part 60, Subpart MM, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.
***

SECTION E.3 ~~FACILITY OPERATION CONDITIONS~~**NSPS**
****

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:
****

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

***

E.3.2 National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)

~~Pursuant to 40 CFR Part 63, Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline), the Permitteee shall comply with the following provisions of this NESHAP (included as Attachment C of this permit)upon startup:~~

The Permittee shall comply with the following provisions of this 40 CFR 63, Subpart EEEE (included as Attachment C of the operating permit), which are incorporated by reference as 326 IAC 12-1, for the units listed above, upon startup:

***

Section E.4 Changes:

SECTION E.4 ~~FACILITY OPERATION CONDITIONS~~**NESHAP**

~~Facility Description [326 IAC 2-7-5(14)]~~**Emissions Unit Description**:			
Permit Section	Emission Unit Name (design and Manufacturer name)	Rated Heat Input Capacity (MMBtu/hr)	Fuels Used
New Emission Unit			
Permit Section D.10(a)(1)	Pretreatment ED Boiler	~~12.0~~ **6 units rated at 1.3 MMBtu/hr each, 7.8 MMBtu/hr total**	Natural Gas
Permit Section D.10(l)	**Spray Booth Boiler**	**6 units rated at 1.25 MMBtu/hr each, 7.5 MMBtu/hr total**	**Natural Gas**
Existing Emission Units			
Permit Section D.4 (a) (3)	ED/Paint Temperature Control Boiler Cleaver Brooks (1989)	4.0 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 1 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 2 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 3 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 4 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 5 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D. 4 (a) (4)	Pre Treatment Boiler 6 Lochinvar Sync (2009)	1.5 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B1-01 Cleaver Brooks (1989)	1.339 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B10-01 Cleaver Brooks (1989)	4.184 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B10-02 Cleaver Brooks (1989)	4.184 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B11-01 Cleaver Brooks (1989)	2.929 MMBtu/Hr	Natural Gas
Permit Section D.8(a)	Temperature Control Boiler B11-02 Cleaver Brooks (1989)	2.929 MMBtu/Hr	Natural Gas

Permit Section D.8(a)	Temperature Control Boiler B09-01 Cleaver Brooks (1989)	5.23 MMBtu/Hr	Natural Gas
(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)			

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.4.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.7565, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the above affected emission units as specified in Table 10 of 40 CFR 63, Subpart DDDDD in accordance with schedule in 40 CFR 63, Subpart DDDDD.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
MC 61-53 IGCN 1003
100 North Senate Avenue
Indianapolis, Indiana 46204

~~and~~

~~United States Environmental Protection Agency, Region V~~
~~Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)~~
~~77 West Jackson Boulevard~~
~~Chicago, Illinois 60604-3590~~

E.4.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters Requirements [40 CFR Part 63, Subpart DDDDD]

~~The provisions of 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters) apply to the above affected emission units and shall comply with the following provisions upon startup:~~
The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart DDDDD, (included as Attachment D of the operating permit), which are incorporated by 326 IAC 20-1, for the above affected emission units upon startup:
~~***~~

SECTION E.5 NSPS

Emissions Unit Description:

Insignificant Activities:

(a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(3) Other insignificant natural gas combustion units approved in 2014 and 2016 for construction: [326 IAC 2-2]

(D) Emergency Equipment:
(1) One (1) natural gas-fired emergency generator with a maximum heat

input capacity of 4.8 MMBtu/hr (rated at 636 HP), permitted in 2016 for construction.

(f) Activities associated with emergencies, including the following:

Emergency generators as follows:

(2) Natural gas turbines or reciprocating engines not exceeding sixteen thousand (16,000) horsepower.

(B) One (1) 225 HP natural gas fired emergency engine, installed in 2010

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

E.5.1 General Provisions Relating to New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines [326 IAC 12-1][40 CFR Part 60, Subpart A] [40 CFR Part 60, Subpart JJJJ]

The provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, apply to the emergency generator, except when otherwise specified in 40 CFR 60, Subpart JJJJ

E.5.2 New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines [40 CFR Part 60, Subpart JJJJ]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ, (included as Attachment E to the operating permit) which are incorporated by reference as 326 IAC 12-1, for the emergency generator upon startup:

(1) 40 CFR §60.4230(4)(iv)
(2) 40 CFR §60.4233(e)
(3) 40 CFR §60.4234
(4) 40 CFR §60.4243
(5) 40 CFR §60.4245

***

SECTION E.6 NESHAP

Emissions Unit Description:

Insignificant Activities:

(a) Space heaters, process heaters, or boilers using the following fuels: Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:

(3) Other insignificant natural gas combustion units approved in 2014 and 2016 for construction: [326 IAC 2-2]

(D) Emergency Equipment:

(1) One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (rated at 636 HP), permitted in 2016 for construction.

(f) Activities associated with emergencies, including the following:

Emergency generators as follows:

(1) Diesel generators not exceeding one thousand six hundred (1,600) horsepower.

(A) One 760 HP diesel fueled emergency engine, installed in 1989.

(2) Natural gas turbines or reciprocating engines not exceeding sixteen thousand (16,000) horsepower.

(A) One (1) 180 HP natural gas fired emergency engine, installed in 1997
(B) One (1) 225 HP natural gas fired emergency engine, installed in 2010

Stationary fire pump engines as follows:

(1) Two 375 HP diesel fired emergency fire pumps, installed in 1989.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.6.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the above affected emission units as specified in Table 8of 40 CFR 63, Subpart ZZZZ in accordance with schedule in 40 CFR 63 Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
MC 61-53 IGCN 1003
100 North Senate Avenue
Indianapolis, Indiana 46204

E.6.2 National Emission Standards for Hazardous Air Pollutants: Reciprocating Internal Combustion Engines (RICE) [40 CFR Part 63, Subpart ZZZZ]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment F to the operating permit), which are incorporated by 326 IAC 20-82, for the following emergency units:

One (1) 760 HP diesel fueled emergency engine, installed in 1989.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(1)(i)
(4) 40 CFR 63.6595(a)(1), (c) - Must comply with this subpart no later than June 15, 2007
(5) 40 CFR 63.6604(c)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625 (h), (i)
(8) 40 CFR 63.6640(f)(1),(2),(3)
(9) 40 CFR 63.6645(b) - submit initial notification not later than December 13, 2004 for unit with site rating >500 HP that started operation before the effective date of this subpart
(10) 40 CFR 63.6650
(11) 40 CFR 63.6655(a), (d), (e)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2b to Subpart ZZZZ of Part 63,
(18) Table 6 to Subpart ZZZZ of Part 63, item 13
(17) Table 8 to Subpart ZZZZ of Part 63

Two (2) 375 HP diesel fired emergency fire pumps, installed in 1987 and one (1) 180 HP emergency engine, installed in 1997.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(1)(ii)
(4) 40 CFR 63.6595(a)(1), (c) -- Must comply with this subpart no later than May 3, 2013
(5) 40 CFR 63.6604(b)
(6) 40 CFR 63.6605
(7) 40 CFR 63.6625 (f), (i)
(8) 40 CFR 63.6640(a), (b), (f)(1),(2),(3)
(9) 40 CFR 63.6645(d) - submit initial notification not later than July 16, 2008 for unit with site rating ≤500 HP that started operation before the effective date of this subpart
(10) 40 CFR 63.6650
(11) 40 CFR 63.6655(a), (d), (e)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2c to Subpart ZZZZ of Part 63, item 1
(17) Table 6 to Subpart ZZZZ of Part 63, item 13
(18) Table 8 to Subpart ZZZZ of Part 63

One (1) natural gas-fired emergency generator with a maximum heat input capacity of 4.8 MMBtu/hr (636 HP), permitted in 2016 for construction.

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a), (b)
(3) 40 CFR 63.6590(a)(2)(i)
(4) 40 CFR 63.6595(a)(3), (c) - Must comply with this subpart upon startup
(5) 40 CFR 63.6605
(6) 40 CFR 63.6625 (h), (j)
(7) 40 CFR 63.6640(f)(1),(2),(3)
(8) 40 CFR 63.6645((c) - submit initial notification not later than 120 days after becoming subject to this subpart.
(9) 40 CFR 63.6650
(10) 40 CFR 63.6655(a), (d)
(11) 40 CFR 63.6660
(12) 40 CFR 63.6665
(13) 40 CFR 63.6670
(14) 40 CFR 63.6675
(15 Table 1a to Subpart ZZZZ of Part 63
(16) Table 1b to Subpart ZZZZ of Part 63
(17) Table 7 to Subpart ZZZZ of Part 63; item 4.
(18) Table 8 to Subpart ZZZZ of Part 63

One (1) 225 HP natural gas fired emergency engine, installed in 2010.

(1) 40 CFR § 63.6590(c).

SECTION E.7 NESHAP

Emissions Unit Description:

(j) Engine assembly -

(2) Four (4) engine test benches, permitted in 2016 for construction to allow the source to test more engines on an hourly basis to support vehicles being assembled on a daily basis.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

E.7.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the above affected emission units, except as otherwise specified in 40 CFR 63, Subpart PPPPP.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
MC 61-53 IGCN 1003
100 North Senate Avenue
Indianapolis, Indiana 46204

E.7.2 National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Stands [40 CFR Part 63, Subpart PPPPP]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart PPPPP, (included as Attachment G to the operating permit), which are incorporated by 326 IAC 20-1, for the above emission units upon startup:

(1) 40 CFR §63.9280
(2) 40 CFR §63.9285
(3) 40 CFR §63.9290
(4) 40 CFR §63.9295(a)(2)
(5) 40 CFR §63.9300
(6) 40 CFR §63.9300
(7) 40 CFR §63.9302
(8) 40 CFR §63.9305
(9) 40 CFR §63.9306
(10) 40 CFR §63.9307
(11) 40 CFR §63.9310
(12) 40 CFR §63.9320
(13) 40 CFR §63.9321
(14) 40 CFR §63.9330
(15) 40 CFR §63.9335
(16) 40 CFR §63.9340
(17) 40 CFR §63.9345
(18) 40 CFR §63.9350
(19) 40 CFR §63.9355
(20) 40 CFR §63.9360
(21) 40 CFR §63.9365
(22) 40 CFR §63.9370
(23) Table 1 to Subpart PPPPP of Part 63—Emission Limitations
(24) Table 3 to Subpart PPPPP of Part 63—Requirements for Initial Compliance Demonstrations
(25) Table 4 to Subpart PPPPP of Part 63—Initial Compliance With Emission Limitations
(26) Table 5 to Subpart PPPPP of Part 63—Continuous Compliance With Emission Limitations
(27) Table 6 to Subpart PPPPP of Part 63—Requirements for Reports

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed PSD/Significant Source Modification No. 157-36379-00050 and Part 70 Operating Permit Renewal No. TT157-36402-00050. The staff recommends to the Commissioner that this PSD/Significant Source Modification and Part 70 Operating Permit Renewal be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Aida DeGuzman at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-4972 or toll free at 1-800-451-6027 extension 3-4972.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Units in this App A calculations are subject to PSD review.

For 326 IAC 2-7-10.5 Applicability

	UNCONTROLLED PTE (tons/year)								
Facilities/Process ID	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO	Worst Single HAP (Hexane)	Combined HAPs
New External Combustion Natural Gas Units	1.39	5.63	5.63	0.44	74.08	4.07	62.23	1.33	1.40
New Internal Combustion Emergency Generator	0.05	0.06	0.06	7.06E-04	0.70	0.35	1.40	5.34E-04	0.09
TOTAL PTE FROM MODIFICATION	**1.44**	**5.69**	**5.69**	**0.44**	**74.79**	**4.42**	**63.63**	**1.33**	**1.49**

For 326 IAC 2-2, PSD Applicability

*UNLIMITED PTE (tons/year)									
Facilities/Process ID	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO	Worst Single HAP (Hexane)	Combined HAPs
New External Combustion Natural Gas Units	1.39	5.63	5.63	0.44	74.08	4.07	62.23	1.33	1.40
New Internal Combustion Emergency Generator	0.05	0.06	0.06	7.06E-04	0.70	0.35	1.40	5.34E-04	0.09
TOTAL PTE FROM MODIFICATION	**1.44**	**5.69**	**5.69**	**0.44**	**74.79**	**4.42**	**63.63**	**1.33**	**1.49**

*LIMITED PTE (tons/year)									
Facilities/Process ID	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO	Worst Single HAP (Hexane)	Combined HAPs
*New Natural Gas Combustion Units + Existing Unchanged Units Permitted in PSD/SSM 157-33759-00050	0.71	2.85	2.85	0.23	37.55	2.07	31.54	0.68	0.71
New Internal Combustion Emergency Generator	0.05	0.06	0.06	7.06E-04	0.70	0.35	1.40	5.34E-04	0.09
TOTAL LIMITED PTE FROM MODIFICATION	**0.76**	**2.91**	**2.91**	**0.23**	**38.25**	**2.42**	**32.94**	**0.68**	**0.80**
PSD Significant Levels	**25**	**15**	**10**	**40**	**40**	**40**	**100**	**--**	**--**

The project is the addition of new combustion units that are being aggregated with the Coating Paint Line C, which is major under PSD for VOC. Coating Paint Line "C" was permitted in PSD/SSM 157-33759. Therefore, this project is also PSD for VOC.

The NOx emissions from the Coating Paint Line C were limited to less than 40 tons/year, which likewise limited the external combustion fuel usage to 751 MMCF/yr. The natural gas usage limit will not be affected by this permitting action.
* - these natural gas combustion units are not controlled. The NOx limit includes boilers.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Units in this App A calculations are subject to PSD review.

326 IAC 2-7-10.5 Applicability

EMISSION UNITS/IDS	Number of Units	Total Heat Input Rate MMBtu/hr	Potential Throughput MMCF/year	PM* 1.9	PM10* 7.6	direct PM2.5* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84
				Emission Factor in lb/MMCF						
				POTENTIAL TO EMIT (TONS/YEAR)						
Paint Line C Natural Gas Combustion Units										
Pretreatment Boiler - ED Body Area	6	7.8	66.99	0.06	0.25	0.25	0.02	3.35	0.18	2.81
PVC Sealer Oven	1	3.5	30.06	0.03	0.11	0.11	0.01	1.50	0.08	1.26
Intermediate (Surfacer) Oven	1	10.1	86.74	0.08	0.33	0.33	0.03	4.34	0.24	3.64
Intermediate (Surfacer) flash zone heater	1	2.5	21.47	0.02	0.08	0.08	0.01	1.07	0.06	0.90
Intermediate (Surfacer) Air House	1	26.5	227.59	0.22	0.86	0.86	0.07	11.38	0.63	9.56
Topcoat #C1 Oven	1	7.6	65.27	0.06	0.25	0.25	0.02	3.26	0.18	2.74
Topcoat flash zone heater	1	2.5	21.47	0.02	0.08	0.08	0.01	1.07	0.06	0.90
Topcoat Oven RTO	1	0.99	8.50	0.01	0.03	0.03	0.00	0.43	0.02	0.36
Topcoat Air House	1	42	360.71	0.34	1.37	1.37	0.11	18.04	0.99	15.15
Working Stage Air House #1-Prep Deck, Offline Areas	1	11	94.47	0.09	0.36	0.36	0.03	4.72	0.26	3.97
Black and Wax Booth	1	13.7	117.66	0.11	0.45	0.45	0.04	5.88	0.32	4.94
Spray Booth Boilers	6	7.5	64.41	0.06	0.24	0.24	0.02	3.22	0.18	2.71
Working Stage Air House #2-Inspection, Touchup Area	1	11	94.47	0.09	0.36	0.36	0.03	4.72	0.26	3.97
Piant Mixing Air House-Body	1	2	17.18	0.02	0.07	0.07	0.01	0.86	0.05	0.72
Rooftop Units - Heating and Cooling Units										
HCI-14-1 Pretreatment Roof	1	0.8337	7.16	0.01	0.03	0.03	0.00	0.36	0.02	0.30
HCU-14-2 Ptetreatment Roof	1	0.8337	7.16	0.01	0.03	0.03	0.00	0.36	0.02	0.30
HCU-14-3 Ptetreatment Roof	1	0.8337	7.16	0.01	0.03	0.03	0.00	0.36	0.02	0.30
HCU-14-4 Ptetreatment Roof	1	0.8337	7.16	0.01	0.03	0.03	0.00	0.36	0.02	0.30
HCU-14-5 Ptetreatment Roof	1	0.8337	7.16	0.01	0.03	0.03	0.00	0.36	0.02	0.30
HCU-14-6 Ptetreatment Roof	1	0.8337	7.16	0.01	0.03	0.03	0.00	0.36	0.02	0.30
HCU-11- Oven Roof	1	0.8	6.87	0.01	0.03	0.03	0.00	0.34	0.02	0.29
HCU-12-Cafeteria	1	0.8	6.87	0.01	0.03	0.03	0.00	0.34	0.02	0.29
HCU-13 Roof of Conveyor Bridge	1	0.4	3.44	0.00	0.01	0.01	0.00	0.17	0.01	0.14
HCU-14 Roof of Conveyor Bridge	1	0.4	3.44	0.00	0.01	0.01	0.00	0.17	0.01	0.14
Rooftop Units - Makeup Air Heating Units										
MAU-14-1 Roof Oven Area	1	1.62	13.91	0.00	0.05	0.05	0.00	0.70	0.04	0.58
MAU-14-2 Roof Oven Area	1	1.62	13.91	0.01	0.05	0.05	0.00	0.70	0.04	0.58
MAU-14-3 Roof Oven Area	1	1.62	13.91	0.01	0.05	0.05	0.00	0.70	0.04	0.58
MAU-14-4 Roof Oven Area	1	1.62	13.91	0.01	0.05	0.05	0.00	0.70	0.04	0.58
MAU-14-5 Roof Oven Area	1	1.62	13.91	0.01	0.05	0.05	0.00	0.70	0.04	0.58
Rooftop Units - Air Heating Units										
AHU-14-1 Penthouse	1	4.167	35.79	0.03	0.14	0.14	0.01	1.79	0.10	1.50
AHU-14-2 Penthouse	1	4.167	35.79	0.03	0.14	0.14	0.01	1.79	0.10	1.50
TOTAL	**41**	**172.53**	**1,481.70**	**1.39**	**5.63**	**5.63**	**0.44**	**74.08**	**4.07**	**62.23**

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
Heating Value 1,020 MMBtu/MMCF

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel
		HAPs - Organics								
Emission Factor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03
EMISSION UNITS/IDS		POTENTIAL TO EMIT (TONS/YEAR)								
Paint Line C Natural Gas Combustion Units										
Pretreatment Boiler - ED Body Area	7.0E-05	4.0E-05	2.5E-03	6.0E-02	1.1E-04	1.67E-05	3.68E-05	4.69E-05	1.27E-05	7.03E-05
PVC Sealer Oven	3.2E-05	1.8E-05	1.1E-03	2.7E-02	5.1E-05	7.51E-06	1.65E-05	2.10E-05	5.71E-06	3.16E-05
Intermediate (Surfacer) Oven	9.1E-05	5.2E-05	3.3E-03	7.8E-02	1.5E-04	2.17E-05	4.77E-05	6.07E-05	1.65E-05	9.11E-05
Intermediate (Surfacer) flash zone heater	2.3E-05	1.3E-05	8.1E-04	1.9E-02	3.7E-05	5.37E-06	1.18E-05	1.50E-05	4.08E-06	2.25E-05
Intermediate (Surfacer) Air House	2.4E-04	1.4E-04	8.5E-03	2.0E-01	3.9E-04	5.69E-05	1.25E-04	1.59E-04	4.32E-05	2.39E-04
Topcoat #C1 Oven	6.9E-05	3.9E-05	2.4E-03	5.9E-02	1.1E-04	1.63E-05	3.59E-05	4.57E-05	1.24E-05	6.85E-05
Topcoat flash zone heater	2.3E-05	1.3E-05	8.1E-04	1.9E-02	3.7E-05	5.37E-06	1.18E-05	1.50E-05	4.08E-06	2.25E-05
Topcoat Oven RTO	8.9E-06	5.1E-06	3.2E-04	7.7E-03	1.4E-05	2.13E-06	4.68E-06	5.95E-06	1.62E-06	8.93E-06
Topcoat Air House	3.8E-04	2.2E-04	1.4E-02	3.2E-01	6.1E-04	9.02E-05	1.98E-04	2.52E-04	6.85E-05	3.79E-04
Working Stage Air House #1-Prep Deck, Offline Areas	9.9E-05	5.7E-05	3.5E-03	8.5E-02	1.6E-04	2.36E-05	5.20E-05	6.61E-05	1.79E-05	9.92E-05
Black and Wax Booth	1.2E-04	7.1E-05	4.4E-03	1.1E-01	2.0E-04	2.94E-05	6.47E-05	8.24E-05	2.24E-05	1.24E-04
Spray Booth Boilers	6.8E-05	3.9E-05	2.4E-03	5.8E-02	1.1E-04	1.61E-05	3.54E-05	4.51E-05	1.22E-05	6.76E-05
Working Stage Air House #2-Inspection, Touchup	9.9E-05	5.7E-05	3.5E-03	8.5E-02	1.6E-04	2.36E-05	5.20E-05	6.61E-05	1.79E-05	9.92E-05
Paint Mixing Air House-Body	1.8E-05	1.0E-05	6.4E-04	1.5E-02	2.9E-05	4.29E-06	9.45E-06	1.20E-05	3.26E-06	1.80E-05
Rooftop Units - Heating and Cooling Units										
HCI-14-1 Pretreatment Roof	7.5E-06	4.3E-06	2.7E-04	6.4E-03	1.2E-05	1.79E-06	3.94E-06	5.01E-06	1.36E-06	7.52E-06
HCU-14-2 Ptetreatment Roof	7.5E-06	4.3E-06	2.7E-04	6.4E-03	1.2E-05	1.79E-06	3.94E-06	5.01E-06	1.36E-06	7.52E-06
HCI-14-3 Pretreatment Roof	7.5E-06	4.3E-06	2.7E-04	6.4E-03	1.2E-05	1.79E-06	3.94E-06	5.01E-06	1.36E-06	7.52E-06
HCI-14-4 Pretreatment Roof	7.5E-06	4.3E-06	2.7E-04	6.4E-03	1.2E-05	1.79E-06	3.94E-06	5.01E-06	1.36E-06	7.52E-06
HCI-14-5 Pretreatment Roof	7.5E-06	4.3E-06	2.7E-04	6.4E-03	1.2E-05	1.79E-06	3.94E-06	5.01E-06	1.36E-06	7.52E-06
HCI-14-6 Pretreatment Roof	7.5E-06	4.3E-06	2.7E-04	6.4E-03	1.2E-05	1.79E-06	3.94E-06	5.01E-06	1.36E-06	7.52E-06
HCU-11- Oven Roof	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.72E-06	3.78E-06	4.81E-06	1.31E-06	7.21E-06
HCU-12-Cafeteria	7.2E-06	4.1E-06	2.6E-04	6.2E-03	1.2E-05	1.72E-06	3.78E-06	4.81E-06	1.31E-06	7.21E-06
HCU-13 Roof of Conveyor Bridge	3.6E-06	2.1E-06	1.3E-04	3.1E-03	5.8E-06	8.59E-07	1.89E-06	2.40E-06	6.53E-07	3.61E-06
HCU-14 Roof of Conveyor Bridge	3.6E-06	2.1E-06	1.3E-04	3.1E-03	5.8E-06	8.59E-07	1.89E-06	2.40E-06	6.53E-07	3.61E-06
Rooftop Units - Makeup Air Heating Units										
MAU-14-1 Roof Oven Area	6.8E-05	8.3E-06	5.2E-04	1.3E-02	2.4E-05	3.48E-06	7.65E-06	9.74E-06	2.64E-06	1.46E-05
MAU-14-2 Roof Oven Area	9.9E-05	8.3E-06	5.2E-04	1.3E-02	2.4E-05	3.48E-06	7.65E-06	9.74E-06	2.64E-06	1.46E-05
MAU-14-3 Roof Oven Area	0.0E+00	8.3E-06	5.2E-04	1.3E-02	2.4E-05	3.48E-06	7.65E-06	9.74E-06	2.64E-06	1.46E-05
MAU-14-4 Roof Oven Area	3.8E-05	8.3E-06	5.2E-04	1.3E-02	2.4E-05	3.48E-06	7.65E-06	9.74E-06	2.64E-06	1.46E-05
MAU-14-5 Roof Oven Area	3.8E-05	8.3E-06	5.2E-04	1.3E-02	2.4E-05	3.48E-06	7.65E-06	9.74E-06	2.64E-06	1.46E-05
Rooftop Units - Air Heating Units										
AHU-14-1 Penthouse	0.0E+00	2.1E-05	1.3E-03	3.2E-02	6.1E-05	8.95E-06	1.97E-05	2.51E-05	6.80E-06	3.76E-05
AHU-14-2 Penthouse	0.0E+00	2.1E-05	1.3E-03	3.2E-02	6.1E-05	8.95E-06	1.97E-05	2.51E-05	6.80E-06	3.76E-05
TOTAL	**1.6E-03**	**8.9E-04**	**5.6E-02**	**1.3E+00**	**2.5E-03**	**3.70E-04**	**8.15E-04**	**1.04E-03**	**2.82E-04**	**1.56E-03**

Worst Single HAP (Hexane)	**1.33**
Total Combined HAPs	**1.40**

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

***Limited Throughput
MMCF/yr
751.0

Units in this App A calculations are subject to PSD review.

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.71	2.85	2.85	0.23	37.55	2.07	31.54

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32
***The NOx emissions from the Coating Paint Line C combustion units were limited to less than 40 tons/year, which likewise limited the fuel usage to 751 MMCF/yr.
This limit will not change in this permitting action PSD/SSM 157-36379-00050, since the proposed new units are aggregated with the original PSD/SSM 157-33759-00050

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Hazardous Air Pollutants (HAPs)

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	7.9E-04	4.5E-04	2.8E-02	0.68	1.3E-03	**0.71**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.9E-04	4.1E-04	5.3E-04	1.4E-04	7.9E-04	**2.1E-03**
					Total HAPs	**0.71**
					Worst HAP	**0.68**

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Natural Gas
Emergency Generator

Part 70 Renewal No.: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Units in this App A calculations are subject to PSD review.

Maximum HP-hr Rating	636
Maximum Heat Input Capacity (MMBtu/hr)	4.80
Maximum Hours Operated per Year (hr/yr)	500
Potential Fuel Usage (MMBtu/yr)	2400
High Heat Value (MMBtu/MMscf)	1020
Potential Fuel Usage (MMcf/yr)	2.35

	Pollutant						
Criteria Pollutants	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
AP-42 Emission Factor (lb/MMBtu)	3.84E-02	4.83E-02	4.83E-02	5.88E-04	-	-	-
**NSPS JJJJ Allowable Emission Factor (lb/HP-hr)	-	-	-	-	4.41E-03	2.20E-03	8.81E-03
Potential Emissions (tons/yr)	0.05	0.06	0.06	0.001	0.70	0.35	1.40

*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM.
PM2.5 emission factor is filterable PM2.5 + condensable PM.
** Emission factors from Table 1 to Subpart JJJJ of Part 60—NOX, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP (converted from g/HP-hr)
AP-42 Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-1

Hazardous Air Pollutants (HAPs)

Pollutant	Emission Factor (lb/MMBtu)	Potential Emissions (tons/yr)
Acetaldehyde	7.76E-03	0.009
Acrolein	7.78E-03	0.009
Benzene	1.94E-03	0.002
1,3-Butadiene	8.20E-04	0.001
Ethylbenzene	1.08E-04	0.000
Formaldehyde	5.52E-02	0.066
Methanol	2.48E-03	0.003
Methylene Chloride	1.47E-04	0.000
Hexane	4.45E-04	0.001
Toluene	9.63E-04	0.001
2,2,4-Trimethylpentane	8.46E-04	0.001
Total PAH**	1.34E-04	0.000
	Total	**0.09**

HAP pollutants consist of the twelve highest HAPs included in AP-42 Table 3.2-1.
**PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

Methodology
Potential Fuel Usage (MMBtu/yr) = [Maximum Heat Input Capacity (MMBtu/hr)] * [Maximum Hours Operating per Year (hr/yr)]
AP-42 EF Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2000 lb/ton]
NSPS JJJJ Potential Emissions (tons/yr) = Emission Factor (lb/HP-hr) * Maximum HP-hr rating * Maximum Hours Operated per Year (hr/yr) * 1 ton / 2,000 lbs

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

The units in these App B calculations are exempt units that were combined in PSD/SSM 36379 and TV Renewal 36402 but were not subject to PSD review.

326 IAC 2-7-10.5 Applicability (This modification is not related to the combustion units subject to PSD)

Process Category	UNCONTROLLED PTE FROM NEW EMISSION UNITS (tons/year)							
	$PM/PM_{10}/PM_{2.5}$	VOC	NO_X	CO	SO_2	Lead	HAPS - Individual	HAPs - Total
New Equipment								
Engine Testing	0.01	0.12	0.12	1.43	0.00	0.00	0.00	0.00
Window Installation	0.00	5.94	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL PTE FROM NEW UNITS	**0.01**	**6.06**	**0.12**	**1.43**	**0.00**	**0.00**	**0.00**	**0.00**
Modified Emission Units	**PTE CHANGE OF MODIFIED EMISSION UNITS (tons/year)**							
Topcoat Line #1 Before modification	0.341	139.70	--	--	--	--	0.00	0.00
Topcoat Line #1 After modification	0.385	142.45	--	--	--	--	0.00	0.00
PTE CHANGE OF MODIFIED UNITS	0.044	2.75	--	--	--	--	0.00	0.00
Total Emission Increase from the Project (tons/year)	**0.06**	**8.81**	**0.12**	**1.43**	**0.00**	**0.00**	**0.00**	**0.00**

326 IAC 2-2 Applicability

Process Category	CONTROLLED PTE FROM NEW EMISSION UNITS (tons/year)							
	$PM/PM_{10}/PM_{2.5}$	VOC	NO_X	CO	SO_2	Lead	HAPS - Individual	HAPs - Total
NEW EMISSION UNITS								
Engine Testing	0.01	0.12	0.12	1.43	0.00	0.00	0.00	0.00
Window Installation	0.00	5.94	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL PTE FROM NEW UNITS	**0.01**	**6.06**	**0.12**	**1.43**	**0.00**	**0.00**	**0.00**	**0.00**
ACTUAL TO PROJECTED ACTUAL (ATPA) -MODIFIED EMISSION UNITS								
Topcoat #1 Baseline Actual Emissions (tons/year)	0.25	109.04	--	--	--	--	--	--
Topcoat #1 Projected Actual Emissions (tons/year)	0.39	168.85	--	--	--	--	--	--
Demand Growth (tons/year)	0.10	30.80	--	--	--	--	--	--
PTE CHANGE OF MODIFIED UNITS	0.04	29.02						
Total Emission Increase from the Project (tons/year)	**0.05**	**35.08**	**0.12**	**1.43**	**0.00**	**0.00**	**0.00**	**0.00**

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

The units in these App B calculations are exempt units that were combined in PSD/SSM 36379 and TV Renewal 36402 but were not subject to PSD review.

Engine Test Benches (Testing Modes)

Testing Mode	E/G rev (rpm)	Speed (km/h)	Speed (mile/h)	Time(min)	Distance (km)	Mileage (miles)	VOC Emissions		CO Emissions		NO_x Emissions		$PM/PM_{10}/PM_{2.5}$ Emissions	
							grams	pounds	grams	pounds	grams	pounds	grams	pounds
E/G Start	250	10.5	6.5	0.1	0.02	0.02	0.004	8.11E-06	0.04	9.47E-05	3.56E-03	7.84838E-06	3.40E-04	7.50E-07
TGV Check	800	33.7	20.9	0.05	0.03	0.02	0.004	8.11E-06	4.29E-02	9.47E-05	3.40E-04	7.49564E-07	3.40E-04	7.50E-07
Warm Up	3000	126.5	78.6	2.31	4.87	3.03	0.56	1.23E-03	6.51	0.01	0.54	1.19E-03	0.05	1.14E-04
Gas Measurement	750	31.6	19.7	1.05	0.55	0.37	0.07	1.50E-04	0.79	1.75E-03	0.07	1.45E-04	6.29E-03	1.39E-05
			Emissions from 1 Bench Test		**5.42**	**3.4**	**--**	**1.40E-03**	**--**	**0.02**	**--**	**1.34E-03**	**--**	**1.29E-04**
			Emissions from one bench performing 1 tests per hour (lbs/hr)				--	0.001	--	0.02	--	0.001	--	0.00013
			Emissions from 4 benches performing 30 tests per hour (lbs/hr)				--	0.04	--	0.49	--	0.04	--	0.00
			Emissions from 4 benches performing 480 tests per day (lbs/day)				--	0.67	--	7.82	--	0.64	--	0.06
			Emissions from 4 benches performing 175,200 tests per year (lbs/year)				--	244.48	--	2852.69	--	235.26	--	22.59
			Emissions from 4 benches performing 175,200 tests per year (tons/y				**--**	**0.12**	**--**	**1.43**	**--**	**0.12**	**--**	**0.01**

Emission Factors

1998+ Nontampered HC Exhaust Emission Rate for Light Duty Gasoline Powered Vehicles	0.184	g/mile
1992+ Nontampered CO Exhaust Emission Rate for Light Duty Gasoline Powered Vehicles	2.147	g/mile
1996+ Nontampered NO_x Exhaust Emission Rate for Light Duty Gasoline Powered Vehicles	0.178	g/mile
1990+ Nontampered PM/PM10/PM2.5 Exhaust Emission Rate for Light Duty Gasoline Powered Vehicles	0.017	g/mile

Number of Engine Tests (4 Benches)		
Tests/Hour	Tests/Day	Tests/Year
30	480	175,200

Emission factors taken from Low Altitude, Light Duty Gasoline Powered Vehicles , USEPA Highway Mobile 5 Emissions Document (Appendix H-3, Table 1.1A-1)

Example Calculations
Emissions (grams) = Mileage (miles) * Emission Factor (g/mile)
Emissions (pounds) = Emissions (grams) * 0.0022046
Emissions from 4 benches performing 30 tests per hour (lbs/hr) = Emissions (pounds) * Number of Tests per Hour

Company Name: **Subaru of Indiana Automotive, Inc.**
Source Address: **5500 State Road 38 East, Lafayette, Indiana 47905**
PSD/SSM **157-36379-00050**
Part 70 Renewal No.: **T157-36402-00050**
Reviewer: **Aida DeGuzman**

The units in these App B calculations are exempt units that were combined in PSD/SSM 36379 and TV Renewal 36402 but were not subject to PSD review.

Window Material Usage/VOC Content

Material to be Applied	VOC Content (lbs VOC/Gal)*	Material Usage Rate (gal/unit)**	Vehicle Production Volume (units/year)***	Estimated VOC Emissions (tons/year)	
Glass Urethane	0.042	0.25	225,000	1.19	
Body Primer	5.88	0.0034	225,000	2.25	12.34 lbs/day <15 lbs/day
Glass Primer	6.523	0.0034	225,000	2.50	for metal body coating (326 IAC 8-2-9 applicability)
Total VOC from Glass Installation:				**5.94**	

Notes:
* VOC content based on materials used in December 2014 at the Lafayette, Indiana vehicle assembly plant
** Usage rate based on historical usage information and an adjustment factor to account for future vehicle changes
*** Production rate based on design rate of 450,000/2 = 225,000 units per year for Line A or Line B

Example Calculation: Glass Urethane
0.042 lb VOC/gal x 0.25 gal/unit x 225,000 units/year = 2,362.5 lbs VOC/year = 1.19 tons VOC/year

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326 IAC 2-2 Applicability:

Topcoat Line #1 Modification

Topcoat #1 (2-year Baseline (2013-2014))

Month/Year	VOC Emissions (tons/month)
Jan-13	9.38
Feb-13	8.18
Mar-13	9.03
Apr-13	9.96
May-13	9.81
Jun-13	9.06
Jul-13	5.29
Aug-13	9.68
Sep-13	8.99
Oct-13	10.44
Nov-13	8.09
Dec-13	7.14
2013 Total	**105.05**
Jan-14	10.05
Feb-14	10.05
Mar-14	10.54
Apr-14	10.02
May-14	9.77
Jun-14	10.06
Jul-14	5.47
Aug-14	10.21
Sep-14	8.14
Oct-14	11.25
Nov-14	9.14
Dec-14	8.32
2014 Total	**113.02**
2-year Avg.	**109.04**

	Projected Actual Emissions			
Emission Unit	**Baseline VOC Actual Emissions (tons/year)**	**Projected VOC Emissions (lb/vehicle)***	**Projected Production Volume (veh/year)****	**Projected Actual Emissions (tons/year)**
Topcoat Line #1	109.04	3.1	110000.0	168.9

Emission Unit	Projected VOC Emissions (lb/vehicle)*	Actual EF (lb/vehicle)	Demand Growth (lb/vehicle)	Production Volume that Could Have Accommodated (veh/year)	Demand Growth Emissions (tons/year)
Topcoat #1	3.1	2.54	0.560	110,000	30.8

Emission Unit	Baseline VOC Actual Emissions (tons/year)	Projected Actual Emissions (tons/year)	VOC Emission - Demand Growth (tons/year)	Net Emission Change (ATPA) (tons/year)
Topcoat Line #1	109.04	168.9	30.8	**29.02**

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326 IAC 2-2 Applicability:

Topcoat Line #1 Modification

PM/PM10/PM2.5 Actual Emissions														
Year	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL	2 year Annual
2013	0.02	0.02	0.03	0.02	0.02	0.02	0.01	0.02	0.02	0.03	0.02	0.02	0.25	0.245
2014	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.03	0.02	0.02	0.24	

Topcoat Line #1PM/PM10/PM2.5 Actual Emissions (lbs/vehicle)														
Year	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL	2 year Annual
2013	0.006	0.006	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.063	0.067
2014	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.006	0.006	0.006	0.071	

	Projected Actual Emissions			
Emission Unit	**Baseline PM/PM10/PM2.5 Actual Emissions (tons/year)**	**Projected Actual PM/PM10/PM2.5 Emissions (lb/vehicle)**	**Projected Production Volume (veh/year)**	**Projected Actual Emissions (tons/year)**
Topcoat Line #1	0.25	0.007	110,000	0.385

Emission Unit	**Projected PM/PM10/PM2.5 Emissions (lb/vehicle)***	**Actual PM/PM10/PM2.5 EF (lb/vehicle)**	**Demand Growth (lb/vehicle)**	**Production Volume that Could Have Accommodated (veh/year)**	**Could Have Accommodated Emissions (tons/year)**
Topcoat Line #1	0.007	0.0062	0.006	110,000	0.341

Emission Unit	**Baseline PM/PM10/PM2.5 Actual Emissions (tons/year)**	**Projected Actual PM/PM10/PM2.5 Emissions**	**PM/PM10/PM2.5 Emission - Demand Growth (tons/year)**	**Net Emission Change (ATPA) (tons/year)**
Topcoat Line #1	0.25	0.385	0.10	**0.04**

Could have accommodated - Highest demonstrated average monthly operating level during the baseline period and that are unrelated to the particular project, including those emissions caused by increased utilization stimulated by "Demand Growth"-
Demand Growth = Could Have Accommodated - Baseline actual emissions

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326 IAC 2-7-10.5 Applicability for Modified Existing Unit

PTE VOC - Topcoat #1 Before Modification			
lb VOC/vehicle	Vehicle/year	lb VOC/year	tons VOC/year
2.54	110,000	279,400	139.7

PTE VOC - Topcoat #1 After Modification			
lb VOC/vehicle	Vehicle/year	lb VOC/year	tons VOC/year
2.59	110,000	284,900	142.45

VOC Emissions Change		
PTE Before Modification (tons/year)	PTE After Modification (tons/year)	PTE Change (tons/year)
139.7	142.45	2.75

PTE PM/PM10/PM2.5 - Topcoat #1 Before Modification			
lb PM/PM10/ PM2.5/vehicle	Vehicle/year	lb PM/PM10/ PM2.5/year	tons PM/PM10/ PM2.5/year
0.0062	110,000	682	0.341

PTE PM/PM10/PM2.5 -Topcoat #1 After Modification			
lb PM/PM10/ PM2.5/vehicle	Vehicle/year	lb PM/PM10/ PM2.5/year	tons PM/PM10/ PM2.5/year
0.007	110,000	770	0.385

PM/PM10/PM2.5 Emissions Change		
PTE Before Modification (tons/year)	PTE After Modification (tons/year)	PTE Change (tons/year)
0.341	0.385	0.044

Methodology:
PTE, tons/yr = lb of pollutant/vehicle x production, vehicles/year x ton/2000 lbs

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
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VOC PTE FROM EXISTING UNITS

Operation	Potential lbs VOC/vehicle	Controlled PTE (tons/year)	Maximum Production (vehicles/year)	Uncontrolled PTE (tons/year)	Overall Control Efficiency	Limited PTE (tons/year)
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	0.15	23.3	310,000	58.13	60%	
Unit 002 - Sealing and PVC Undercoating Line	0.56	86.8	310,000	86.8	N/A	
Unit 003 - Topcoat System (Topcoat 1 - Vehicle Line B)	2.10	115.50	110,000	140.85	18%	
Unit 003 - Topcoat System (Topcoat 2 and Topcoat 3 - Vehicle Line A)	2.78	278.00	200,000	339.02	18%	
Unit 004 - Intermediate (Surfacer) Coating Line	1.40	217.00	310,000	264.63	18%	
Unit 005 - Plastic Bumper Coating Line (PBL)	0.73	91.25	250,000	111.28	18%	
Currently PFPLS#2 - now Plastic Bumper Coating Line 005B (w/o purge solvent)	1.000	125.0	250,000	158.2	21%	1,084.5 (D1.3)
Unit 006 - Anticorrosion Coating (Black and Wax - Paint Shop Wax Booth - Trim & Final Assembly)	0.73	113.15	310,000	113.2	--	
Unit 007 - Final Repair (Touchup) Painting (Trim & Final Assembly)	0.00065	0.15	450,000	0.15	--	
Unit 010 - Unit 010 - Trim Line (Application of Trim Shop/ Body Shop Adhesives & Sealers)	0.11	24.75	450,000	24.8	--	
Unit 012 - Purge Solvent Recovery System (Vehicle Line A)	0.35	54.25	310,000	54.3	--	
Unit 011 - Storage Tanks (i.e., Gasoline, Purge Thinner, Waste Purge, Vehicle Fluids)	--	1.1	--	1.1	--	
Sourcewide natural Gas	--	3.4	--	3.4	--	
Total Uncontrolled PTE From Existing Units PTE (tons/yr)	**--**	**1133.6**	**--**	**1355.7**		

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Anticorrosion for Paint Line "C"

Summary of Estimated Trim and Final Assembly Line - Anticorrosion (Underbody Wax) Emissions - VOC

Anticorrosion Usage Rate (gallons/unit)	Density (lbs/gal)	Weight % Solvent	Anticorrosion Material VOC Content (lbs VOC/gallon)	Potential Lbs VOC/Unit	Production (Units/Year)	Potential to Emit VOC Emissions (lbs/year)	Potential to Emit VOC Emissions (tons/year)
0.23	10.25	16.6%	1.7	0.391	140,000	54,740	27.37

Summary of Estimated Anticorrosion Emissions - $PM/PM_{10}/PM_{2.5}$

Anticorrosion Usage Rate (gallons/unit)	Production (Units/Year)	Anticorrosion Usage Rate (gallons/year)	Density (lbs/gal)	Weight % Solids	Potential to Emit $PM/PM_{10}/PM_{2.5}$ Emissions (lbs/year)	Potential to Emit $PM/PM_{10}/PM_{2.5}$ Emissions (tons/year)
0.23	160,000	36,800	10.25	83.4%	314.6	0.16

Notes:
*Potential emissions of regulated HAPs are anticipated to be negligible

Efficiencies
Transfer Efficiency (Underbody Wax) = 80.0%
Dry Filter Collection Efficiency = 99.5%

Example Calculations
Potential to Emit VOC Emissions (lbs/year) = Potential Lbs VOC/Unit * Production (Units/Year)
Potential to Emit VOC Emissions (tons/year) = Potential to Emit VOC Emissions (lbs/year) / 2000
Potential to Emit $PM/PM_{10}/PM_{2.5}$ Emissions (lbs/year) = Anticorrosion Usage Rate (gallons/year) * Density (lbs/gal) * Weight % Solids * (1 - Transfer Efficiency (Underbody Wax)) * (1 - Dry Filter Collection Efficiency)
Potential to Emit $PM/PM_{10}/PM_{2.5}$ Emissions (tons/year) = Potential to Emit $PM/PM_{10}/PM_{2.5}$ Emissions (lbs/year) / 2000

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Paint Line System "C"Option A

Operation	Potential lbs VOC/vehicle*	Maximum Production (vehicles/year)	Controlled PTE VOC (tons/year)
Unit 013 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line) - Paint Line C	0.46	160,000	36.8
Unit 014 - Sealing, LASD and PVC Undercoating Line - Paint Line "C" - Application of body sealer materials	0.73	160,000	58.4
Unit 014 Sealing, LASD and PVC Undercoating Line - Paint Line "C" - Application of LASD (Liquid Applies Sound Deadeaner)	0.57	160,000	45.6
Unit 015 - Intermediate (Surfacer) Coating Line - Paint Line C	0.72	160,000	57.6
Unit 016 - Topcoat System - Paint Line C - Application of waterborne basecoat and solventborne clearcoat materials	2.85	160,000	228.0
Unit 016 - Topcoat System - Paint Line C - Body Touch up	0.00039	160,000	0.03
Unit 017 - Anticorrosion Coating Operations (Black and Wax Application) scenario 1 Paint Line C	0.08	160,000	6.4
Unit 017 - Anticorrosion Coating Operations (Black and Wax Application) scenario 2 Paint Line C	0.08	160,000	6.4
[1]Existing Modified/Converted (fr. Non Subaru to Subaru vehicles) PFPL#2 - Plastic fascia Paint Line Now ID 005B	1.00	250,000	125.0
Unit 019 - Purge Solvent Recovery System - Paint Line C	0.4089	410,000	83.8
[1]Existing Unmodified Plastic Bumper, Unit 005	1.00	250,000	125.0
Unit 020 - Miscellaneous Support Operations - Paint Line C	0.19	160,000	15.2
Total Controlled PTE from New Units (tons/yr)	--	--	**531.86**

Notes:
[1] This Table simply shows the new PTEs of existing modified units. For 326 IAC 2-2 for modified units, see ATP test (Page 5 of this Appendix A).

[2]Purge Solvent Recovery System is based on emissions from the following: Build Paint Line "C" without Bumper (160,000 vehicles/year) and Build Plastic Bumper Coating Line Unit 005B (250,000 vehicles/year) - Total VOC emissions are based on 160,000 vehicles/year from Paint Line C, an extrapolated VOC lbs/vehicle rate = 0.33 and 26.3 tons VOC/year, and 250,000 vehicles/year from Unit 005B, an extrapolated VOC lbs/vehicle rate = 0.46 and 57.52 tons VOC/year, total VOC = 83.82 tons/year

*lbs VOC/Vehicle based on historical material usage, anticipated levels of VOC control and adjustment variable to account for future change in vehicle size

Methodology:
Potential VOC Emissions Rate (tons/year) = Potential lbs VOC/vehicle * Max. Production (vehicles/year) / 2000

Company Name: Subaru of Indiana Automotive, Inc.
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Paint Line System C (Uncontrolled)

Operation	Potential lbs/VOC/vehicle	Maximum Production	Uncontrolled PTE VOC
Unit 013 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line) - Paint Line C	0.46	160,000	36.8
Unit 014 - Sealing, LASD and PVC Undercoating Line - Paint Line "C" - Application of body sealer materials	0.73	160,000	58.4
Unit 014 Sealing, LASD and PVC Undercoating Line - Paint Line "C" - Application of LASD (Liquid Applies Sound Deadeaner)	0.57	160,000	45.6
Unit 015 - Intermediate (Surfacer) Coating Line - Paint Line C	0.72	160,000	57.6
Unit 016 - Topcoat System - Paint Line C - Application of waterborne basecoat and solventborne clearcoat materials	3.48	160,000	278.4
Unit 016 - Topcoat System - Paint Line C - Body Touch up Scenario 1	0.00039	160,000	0.031
Unit 017 - Anticorrosion Coating Operations (Black and Wax Application) Paint Line C	0.08	160,000	6.4
Existing Modified/Converted (fr. Non Subaru to Subaru vehicles) PFPL#2 - Plastic fascia Paint Line Now ID 005B	1.00	250,000	125.0
Unit 019 - Purge Solvent Recovery System - Paint Line C	0.41	410,000	84.1
Existing Unmodified Plastic Bumper, Unit 005	1.00	250,000	125.0
Unit 020 - Miscellaneous Support Operations - Paint Line C	0.19	160,000	15.2
Total Ucontrolled PTE from New Units (tons/yr)	--	--	**582.5**

Notes:
[1] This Table simply shows the new PTEs of existing modified units. For 326 IAC 2-7-10.5 for modified units, see PTE emission change (PTE Before and PTE after the Change, Page 4 of this App A).

[2]Purge Solvent Recovery System is based on emissions from the following: Build Paint Line "C" without Bumper (160,000 vehicles/year) and Build Plastic Bumper Coating Line Unit 005B (250,000 vehicles/year) - Total VOC emissions are based on 160,000 vehicles/year from Paint Line C, an extrapolated VOC lbs/vehicle rate = 0.33 and 26.3 tons VOC/year, and 250,000 vehicles/year from Unit 005B, an extrapolated VOC lbs/vehicle rate = 0.46 and 57.52 tons VOC/year, total VOC = 83.82 tons/year

*lbs VOC/Vehicle based on historical material usage, anticipated levels of VOC control and adjustment variable to account for futu

Methodology:
Potential VOC Emissions Rate (tons/year) = Potential lbs VOC/vehicle * Max. Production (vehicles/year) / 2000

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Paint Line System C Uncontrolled PTE of PM/PM10/PM2.5

Historical Actual PM Emissions*

Calendar Year	Vehicle Production**	PM Emissions (tons/year)**	PM Emissions (lbs/vehicle)
2003	122,227	5.51	0.09
2004	118,274	5.17	0.09
2005	118,886	5.72	0.10
2006	110,272	5.04	0.09
2007	147,161	5.48	0.07
2008	183,152	7.07	0.08
2009	170,888	6.29	0.07
2010	246,129	6.99	0.06
2011	240,855	6.53	0.05
2012	277,908	7.59	0.05

Average PM Emissions (lbs/vehicle)	0.076
Based on calendar years 2003 - 2012	

*PM emission rates assume PM_{10} and $PM_{2.5}$ are equivalent. For example, 1 ton/year of PM is conservatively assumed to be 1 ton/year of PM_{10} and 1 ton/year of $PM_{2.5}$

**Vehicle production and PM Emissions based on data submitted in ISTEPS for 2003-2012

Controlled PTE of PM/PM10/PM2.5 from Paint Overspray ***

0.076 lbs of PM/Vehicle x 160,000 vehicles/year x 1 ton/2000 lbs =	**6.0**	**tons/year $PM/PM_{10}/PM_{2.5}$**	

Notes:
***Reflects actual material usage, actual weight percent solids, actual transfer efficiency and removal efficiency of the paint overspray collection systems for SIA's existing paint line system. This approach is being utilized to estimate the PTE of PM/PM10/PM2.5 from the new paint line system ("C")

Company Name: Subaru of Indiana Automotive, Inc.
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New Paint Line System C - PM/PM10/PM2.5 Emissions

Historical Actual PM Emissions*

Calendar Year	Vehicle Production**	PM Emissions (tons/year)**	PM Emissions (lbs/vehicle)
2003	122,227	5.51	0.09
2004	118,274	5.17	0.09
2005	118,886	5.72	0.10
2006	110,272	5.04	0.09
2007	147,161	5.48	0.07
2008	183,152	7.07	0.08
2009	170,888	6.29	0.07
2010	246,129	6.99	0.06
2011	240,855	6.53	0.05
2012	277,908	7.59	0.05

Average PM Emissions (lbs/vehicle)	0.076	**Average Uncontrolled PM Emissions**	15.2
Based on calendar years 2003 - 2012		Based on no controls	

*PM emission rates assume PM_{10} and $PM_{2.5}$ are equivalent. For example, 1 ton/year of PM is conservatively assumed to be 1 ton/year of PM_{10} and 1 ton/year of $PM_{2.5}$

**Vehicle production and PM Emissions based on data submitted in ISTEPS for 2011-2012

Uncontrolled PTE of PM/PM10/PM2.5 from Paint Overspray ***

15.2 lbs of Uncontrolled PM/Vehicle x 160,000 vehicles/year x 1 ton/2000 lbs =	**1216.0**	**tons/year PM/PM_{10}/$PM_{2.5}$**

Notes:

***Reflects actual material usage, actual weight percent solids, actual transfer efficiency and no removal efficiency of the paint overspray collection systems for SIA's existing paint line system. This approach is being utilized to estimate the potential PM emission rate from the new paint line system ("C")

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Estimated Limited Potential Regulated Air Pollutants - New Paint Line System C - Updated Final Engineering Design Heat Inputs

Combustion Equipment - Natural Gas

Emission Unit Description	Heat Input Body (MMBtu/hr)	Heat Input Bumper (MMBtu/hr)	Total Heat Input (MMBTU/hr)	Total Fuel Usage (MMscf/year)	Air Contaminant Emissions											
					$PM/PM_{10}/PM_{2.5}$		SO_2		NO_x		VOC		CO		Pb	
					lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
New Paint Shop																
Pretreatment & ED Boiler	7.9	0	7.9	45.3	0.06	0.17	0.0046	0.014	0.77	2.26	0.04	0.12	0.65	1.90	3.87E-06	1.13E-05
ED/Bumper (Unit 018 or 005B) Ovens	4.4	3.0	7.4	42.4	0.06	0.16	0.0044	0.013	0.73	2.12	0.04	0.12	0.61	1.78	3.63E-06	1.06E-05
Sealer Oven	1.2	0.0	1.2	6.9	0.01	0.03	0.0007	0.002	0.12	0.34	0.01	0.02	0.10	0.29	5.88E-07	1.72E-06
Surface Oven	3.3	0.0	3.3	18.9	0.02	0.07	0.0019	0.006	0.32	0.95	0.02	0.05	0.27	0.79	1.62E-06	4.73E-06
Primer Surfacer Heated	1.1	1.2	2.3	13.2	0.02	0.05	0.0014	0.004	0.23	0.66	0.01	0.04	0.19	0.55	1.13E-06	3.30E-06
Basecoat Heated Flash	1.1	1.2	2.3	13.2	0.02	0.05	0.0014	0.004	0.23	0.66	0.01	0.04	0.19	0.55	1.13E-06	3.30E-06
Topcoat #C1 Oven	3.8	0.0	3.8	21.8	0.03	0.08	0.0022	0.007	0.37	1.09	0.02	0.06	0.31	0.91	1.86E-06	5.45E-06
Topcoat Oven RTO	0.6	0.0	0.6	3.4	0.00	0.01	0.0004	0.001	0.06	0.17	0.00	0.01	0.05	0.14	2.94E-07	8.60E-07
Surfacer/Bumper Air Houses	8.4	17.7	26.1	149.6	0.19	0.57	0.0154	0.045	2.56	7.48	0.14	0.41	2.15	6.28	1.28E-05	3.74E-05
Topcoat Air House	26.1	0.0	26.1	149.6	0.19	0.57	0.0154	0.045	2.56	7.48	0.14	0.41	2.15	6.28	1.28E-05	3.74E-05
Working Stage Air Houses	9.5	4.4	13.9	79.7	0.10	0.30	0.0082	0.024	1.36	3.98	0.07	0.22	1.14	3.35	6.81E-06	1.99E-05
Working Stage Air House	1.8	0.0	1.8	10.3	0.01	0.04	0.0011	0.003	0.18	0.52	0.01	0.03	0.15	0.43	8.82E-07	2.58E-06
Working Stage Air House	8.7	0.0	8.7	49.9	0.06	0.19	0.0051	0.015	0.85	2.49	0.05	0.14	0.72	2.09	4.26E-06	1.25E-05
Mixing Air Houses	4.5	1.8	6.3	36.1	0.05	0.14	0.0037	0.011	0.62	1.81	0.03	0.10	0.52	1.52	3.09E-06	9.03E-06
Working Stage Air House	10.0	0.0	10.0	57.3	0.07	0.22	0.0059	0.017	0.98	2.87	0.05	0.16	0.82	2.41	4.90E-06	1.43E-05
Black & Wax Booth	5.3	0.0	5.3	30.4	0.04	0.12	0.0031	0.009	0.52	1.52	0.03	0.08	0.44	1.28	2.60E-06	7.60E-06
Wax Application Booth	4.0	0.0	4.0	22.9	0.03	0.09	0.0024	0.007	0.39	1.15	0.02	0.06	0.33	0.96	1.96E-06	5.73E-06
Total - Paint Shop*	**101.7**	**29.3**	**131.00**	**751.00**	**0.98**	**2.85**	**0.08**	**0.23**	**12.84**	**37.55**	**0.71**	**2.07**	**10.79**	**31.54**	**6.42E-05**	**1.88E-04**

Notes:

Equivalent Hours per Year - Natural Gas = 5,847.5

Each of the new and existing external combustion units associated with Paint line C are subject to a combined natural gas usage limit of 751 MMCF/yr. The 5,847.5 hours per year represents the equivalent of the usage limit.

Fuel Properties:

	Natural Gas	Units
Higher Heating Value	1,020	Btu/cf

Fuel Properties:

	Natural Gas	Units
Higher Heating Value	1,020	Btu/cf

CATEGORY		EMISSION FACTORS(1) (lb/MMscf)						EMISSION FACTORS(2) (lb/MMBtu)					
		$PM/PM_{10}/PM_{2.5}$	SO_2	NO_x	VOC	CO	Pb	$PM/PM_{10}/PM_{2.5}$	SO_2	NO_x	VOC	CO	Pb
Natural Gas - < 100 MMBtu		7.6	0.6	100	5.5	84	0.0005	0.0075	0.0006	0.098	0.0054	0.0824	4.90E-07

Notes:

(1) Emission factors obtained from AP-42 Section 1.4, Natural Gas Combustion, 7/98. Factors for CO taken from Table 1.4-1 - Emission Factor for carbon Monoxide (CO) from Natural Gas Combustion. Used Uncontrolled factor for Small Boilers (< 100). Factors for VOM, $PM/PM_{10}/PM_{2.5}$ and SO_2 taken from Table 1.4-2 - Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion. All PM (total, condensible, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM_{10} and $PM_{2.5}$.

(2) To convert lbs/MMscf to lbs/MMBtu, the lbs/MMscf emission factors were divided by 1,020.

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Heat Input Rate (lbs/MMBtu) * Emission Factor (lbs/MMBtu)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hrs/yr) / 2000

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential HAPs - New Paint Line System C - Updated Final Engineering Design Heat Inputs

Pollutant	HAP[a] Yes/No	Emission Factor (lb/MMBtu)[b]	Emission Factor Source	Estimated Potential Emissions (lb/hr)
Formaldehyde	Yes	7.35E-05	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.82E-02**
2-Methylnaphthalene	Yes	2.35E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**9.01E-06**
3-Methylchloranthrene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.76E-07**
7,12-Dimethylbenz(a)anthracene	Yes	1.57E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.01E-06**
Acenaphthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.76E-07**
Acenaphthylene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.76E-07**
Anthracene	Yes	2.35E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**9.01E-07**
Arsenic	Yes	1.96E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**7.51E-05**
Benz(a)anthracene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.76E-07**
Benz(a)pyrene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**4.51E-07**
Benzene	Yes	2.06E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**7.89E-04**
Benzo(b)fluoranthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.76E-07**
Benzo(g,h,i)perylene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**4.51E-07**
Benzo(k)fluoranthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.76E-07**
Beryllium	Yes	1.18E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**4.51E-06**
Cadmium	Yes	1.08E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**4.13E-04**
Chromium	Yes	1.37E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**5.26E-04**
Chrysene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.76E-07**
Cobalt	Yes	8.24E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**3.15E-05**
Dibenzo(a,h)anthracene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**4.51E-07**
Dichlorobenzene	Yes	1.18E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**4.51E-04**
Fluoranthene	Yes	2.94E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.13E-06**
Fluorene	Yes	2.75E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.05E-06**
Hexane	Yes	1.76E-03	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.76E-01**
Indeno(1,2,3-cd)pyrene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.76E-07**
Manganese	Yes	3.73E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**1.43E-04**
Mercury	Yes	2.55E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**9.76E-05**
Naphthalene	Yes	5.98E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.29E-04**
Nickel	Yes	2.06E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**7.89E-04**
Phenanathrene	Yes	1.67E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.38E-06**
Pyrene	Yes	4.90E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.88E-06**
Selenium	Yes	2.35E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**9.01E-06**
Toluene	Yes	3.33E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.28E-03**
			Total PTE, tons/yr	**7.09E-01**

Equipment	Total Heat Input (MMBtu/hr)	*Hours of Operation (hrs/yr)
Natural Gas-Fired Combustion Sources - Paint Shop	131.00	5,848

*Each of the new and existing external combustion units associated with Paint line C are subject to a combined natural gas usage limit of 751 MMCF/yr. The 5,847.5 hours per year represents the equivalent of the usage limit.

Total Heat Input = **131.00**
Pounds per Ton = **2000**

Shaded Cell is Highest Individual HAP Emission Rate

Notes:
(a) Regulated under Section 112(b) for Clean Air Act.
(b) Emission factors taken from AP-42, Chapter 1 - External Combustion Sources, Table 1.4-3 - Emission Factors for Speciated Organic Compounds from Natural Gas Combustion and Table 1.4-4 - Emission Factors for Metals from Natural Gas Combustion.

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Emission Factor (lbs/MMBtu) x Heat Input Rate (MMBtu/hr)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hours/year) / 2000 (lbs/ton)

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential Greenhouse Gases (GHGs) - Proposed New Paint Line System C - Updated Final Engineering Design Heat Inputs

Emission Factor Table

Fuel	Fuel Classification	Higher Heating Value (HHV)			CO_2 Emission Factor (EF)			CH_4 Emission Factor (EF)			N_2O Emission Factor		
		Value - HHV	Default - HHV	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units
Natural Gas	Fossil-gaseous	0.00102	1.028E-03	MMBtu/scf	53.02	53.02	kg/MMBtu	0.001	1.0E-03	kg/MMBtu	0.0001	1.0E-04	kg/MMBtu

Notes:

Default values for natural gas were obtained from the EPA Greenhouse Gas Reporting Rule (10/30/2009) Tables C-1 and C-2. Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

Annual GHG Calculation (By GHG Rule Eq. C-2a and C-2b)

Heat Input (MMBtu/hr)*	Heat Input (MMBtu/yr)	Fuel Use (scf/year)	Calculation Tier[a]	*Hours of Operation (hrs/yr)
131.00	766,023	7.51E+08	Tier 1	5,848

*Each of the new and existing external combustion units associated with Paint line C are subject to a combined natural gas usage limit of 751 MMCF/yr. The 5,847.5 hours per year represents the equivalent of the usage limit.

Parameter	CO_2	CH_4	N_2O	TOTAL
EF[b] (kg/MMBtu)	53.02	0.001	0.0001	--
Estimated GHG Emissions (metric tons)	40,615	0.7660	0.07660	--
Estimated GHG Emissions (tons)	**44,770**	**0.8444**	**0.08444**	**--**
Global Warming Potential (GWP)[c] (kg CO_2e/kg)	1	25	298	--
Estimated GHG Emissions (metric tons CO_2e)	40,615	19.151	22.827	40,656
Estimated GHG Emissions (tons CO_2e)	**44,770**	**21.110**	**25.16**	**44,816**

Notes:

a) The default HHV value from Table C-1 of the EPA Greenhouse Gas Reporting Rule is substituted when no actual HHV data from fuel sampling is available. Use of the default HHV value constitutes the Tier 1 calculation method while use of HHV values obtained from fuel sampling constitutes Tier 2.

b) Emission factors (EF) for natural gas were obtained from Tables C-1 and C-2 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98). Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

c) Global warming potentials (GWP) were originally obtained from Table A-1 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98) - CO_2 - 1, CH_4 - 21 and N_2O - 310. The GWPs have been updated to reflect the GWPs presented in the IPCC Fourth Assessment Report, 2007.

Example Calculations

Estimated GHG Emissions (metric tons) = Fuel Use (scf/year) * Emission Factor (kg/MMBtu) * High Heat Value (MMBtu/scf) * 0.001 (metric tons/kg)

Estimated GHG Emissions (metric tons CO_2e) = Estimated GHG Emissions (metric tons) * Global Warming Potential (kg CO_2e/kg)

Estimated GHG Emissions (tons CO_2e) = Estimated GHG Emissions (metric tons CO_2e) * 1.10231

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential Regulated Air Pollutants - New Paint Line System C - Updated Final Engineering Design Heat Inputs

Combustion Equipment - Natural Gas

Emission Unit Description	Heat Input Body (MMBtu/hr)	Heat Input Bumper (MMBtu/hr)	Total Heat Input (MMBTU/hr)	Total Fuel Usage (MMscf/year)	Air Contaminant Emissions											
					$PM/PM_{10}/PM_{2.5}$		SO_2		NO_x		VOC		CO		Pb	
					lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
New Paint Shop																
Pretreatment & ED Boiler	7.9	0	7.9	67.8	0.06	0.26	0.0046	0.020	0.79	3.46	0.04	0.19	0.65	2.85	3.87E-06	1.70E-05
ED/Bumper (Unit 018 or 005B) Ovens	4.4	3.0	7.4	63.6	0.06	0.24	0.0044	0.019	0.74	3.24	0.04	0.17	0.61	2.67	3.63E-06	1.59E-05
Sealer Oven	1.2	0.0	1.2	10.3	0.01	0.04	0.0007	0.003	0.12	0.53	0.01	0.03	0.10	0.43	5.88E-07	2.58E-06
Surface Oven	3.3	0.0	3.3	28.3	0.02	0.11	0.0019	0.009	0.33	1.45	0.02	0.08	0.27	1.19	1.62E-06	7.09E-06
Primer Surfacer Heated	1.1	1.2	2.3	19.8	0.02	0.08	0.0014	0.006	0.23	1.01	0.01	0.05	0.19	0.83	1.13E-06	4.94E-06
Basecoat Heated Flash	1.1	1.2	2.3	19.8	0.02	0.08	0.0014	0.006	0.23	1.01	0.01	0.05	0.19	0.83	1.13E-06	4.94E-06
Topcoat #C1 Oven	3.8	0.0	3.8	32.6	0.03	0.12	0.0022	0.010	0.38	1.66	0.02	0.09	0.31	1.37	1.86E-06	8.16E-06
Topcoat Oven RTO	0.6	0.0	0.6	5.2	0.00	0.02	0.0004	0.002	0.06	0.26	0.00	0.01	0.05	0.22	2.94E-07	1.29E-06
Surfacer/Bumper Air Houses	8.4	17.7	26.1	224.2	0.19	0.85	0.0154	0.067	2.61	11.43	0.14	0.62	2.15	9.41	1.28E-05	5.60E-05
Topcoat Air House	26.1	0.0	26.1	224.2	0.19	0.85	0.0154	0.067	2.61	11.43	0.14	0.62	2.15	9.41	1.28E-05	5.60E-05
Working Stage Air Houses	9.5	4.4	13.9	119.4	0.10	0.45	0.0082	0.036	1.39	6.09	0.07	0.33	1.14	5.01	6.81E-06	2.98E-05
Working Stage Air House	1.8	0.0	1.8	15.5	0.01	0.06	0.0011	0.005	0.18	0.79	0.01	0.04	0.15	0.65	8.82E-07	3.86E-06
Working Stage Air House	8.7	0.0	8.7	74.7	0.06	0.28	0.0051	0.022	0.87	3.81	0.05	0.21	0.72	3.14	4.26E-06	1.87E-05
Mixing Air Houses	4.5	1.8	6.3	54.1	0.05	0.21	0.0037	0.016	0.63	2.76	0.03	0.15	0.52	2.27	3.09E-06	1.35E-05
Working Stage Air House	10.0	0.0	10.0	85.9	0.07	0.33	0.0059	0.026	1.00	4.38	0.05	0.24	0.82	3.61	4.90E-06	2.15E-05
Black & Wax Booth	5.3	0.0	5.3	45.5	0.04	0.17	0.0031	0.014	0.53	2.32	0.03	0.13	0.44	1.91	2.60E-06	1.14E-05
Wax Application Booth	4.0	0.0	4.0	34.4	0.03	0.13	0.0024	0.010	0.40	1.75	0.02	0.09	0.33	1.44	1.96E-06	8.59E-06
Total - Paint Shop*	**101.7**	**29.3**	**131.00**	**1125.06**	**0.98**	**4.28**	**0.08**	**0.34**	**13.10**	**57.38**	**0.71**	**3.09**	**10.79**	**47.25**	**6.42E-05**	**2.81E-04**

Notes:

Limited Hours per Year - Natural Gas = 8,760

Fuel Properties:

	Natural Gas	Units
Higher Heating Value	1,020	Btu/cf

Fuel Properties:

	Natural Gas	Units
Higher Heating Value	1,020	Btu/cf

CATEGORY		EMISSION FACTORS(1) (lb/MMscf)						EMISSION FACTORS(2) (lb/MMBtu)					
		$PM/PM_{10}/PM_{2.5}$	SO_2	NO_x	VOC	CO	Pb	$PM/PM_{10}/PM_{2.5}$	SO_2	NO_x (3)	VOC	CO	Pb
Natural Gas - < 100 MMBtu		7.6	0.6	102	5.5	84	0.0005	0.0075	0.0006	0.100	0.0054	0.0824	4.90E-07

Notes:

(1) Emission factors obtained from AP-42 Section 1.4, Natural Gas Combustion, 7/98. Factors for CO taken from Table 1.4-1 - Emission Factor for carbon Monoxide (CO) from Natural Gas Combustion. Used Uncontrolled factor for Small Boilers (< 100). Factors for VOM, $PM/PM_{10}/PM_{2.5}$ and SO_2 taken from Table 1.4-2 - Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion. All PM (total, condensible, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM_{10} and $PM_{2.5}$.

(2) To convert lbs/MMscf to lbs/MMBtu, the lbs/MMscf emission factors were divided by 1,020.

(3) NO_x emission limit for new equipment based on BACT limit of 0.10 lbs/MMBtu.

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Heat Input Rate (lbs/MMBtu) * Emission Factor (lbs/MMBtu)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hrs/yr) / 2000

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential HAPs - New Paint Line System C - Updated Final Engineering Design Heat Inputs

Pollutant	HAP[(a)] Yes/No	Emission Factor (lb/MMBtu)[(b)]	Emission Factor Source	Estimated Potential Emissions (lb/hr)
Formaldehyde	Yes	7.35E-05	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**4.22E-02**
2-Methylnaphthalene	Yes	2.35E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.35E-05**
3-Methylchloranthrene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.01E-06**
7,12-Dimethylbenz(a)anthracene	Yes	1.57E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**9.00E-06**
Acenaphthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.01E-06**
Acenaphthylene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.01E-06**
Anthracene	Yes	2.35E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.35E-06**
Arsenic	Yes	1.96E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**1.13E-04**
Benz(a)anthracene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.01E-06**
Benz(a)pyrene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.75E-07**
Benzene	Yes	2.06E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.18E-03**
Benzo(b)fluoranthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.01E-06**
Benzo(g,h,i)perylene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.75E-07**
Benzo(k)fluoranthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.01E-06**
Beryllium	Yes	1.18E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**6.75E-06**
Cadmium	Yes	1.08E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**6.19E-04**
Chromium	Yes	1.37E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**7.88E-04**
Chrysene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.01E-06**
Cobalt	Yes	8.24E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**4.73E-05**
Dibenzo(a,h)anthracene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.75E-07**
Dichlorobenzene	Yes	1.18E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.75E-04**
Fluoranthene	Yes	2.94E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.69E-06**
Fluorene	Yes	2.75E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.58E-06**
Hexane	Yes	1.76E-03	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.01E+00**
Indeno(1,2,3-cd)pyrene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.01E-06**
Manganese	Yes	3.73E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**2.14E-04**
Mercury	Yes	2.55E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**1.46E-04**
Naphthalene	Yes	5.98E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.43E-04**
Nickel	Yes	2.06E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**1.18E-03**
Phenanathrene	Yes	1.67E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**9.56E-06**
Pyrene	Yes	4.90E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.81E-06**
Selenium	Yes	2.35E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**1.35E-05**
Toluene	Yes	3.33E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.91E-03**
			Total PTE, tons/yr	**1.06E+00**

Equipment	Total Heat Input (MMBtu/hr)	*Hours of Operation (hrs/yr)
Natural Gas-Fired Combustion Sources - Paint Shop	131.00	8,760

Total Heat Input = **131.00**
Pounds per Ton = **2000**

Shaded Cell is Highest Individual HAP Emission Rate

Notes:
(a) Regulated under Section 112(b) for Clean Air Act.
(b) Emission factors taken from AP-42, Chapter 1 - External Combustion Sources, Table 1.4-3 - Emission Factors for Speciated Organic Compounds from Natural Gas Combustion and Table 1.4-4 - Emission Factors for Metals from Natural Gas Combustion.

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Emission Factor (lbs/MMBtu) x Heat Input Rate (MMBtu/hr)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hours/year) / 2000 (lbs/ton)

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential Greenhouse Gases (GHGs) - Proposed New Paint Line System C - Updated Final Engineering Design Heat Inputs

Emission Factor Table

Fuel	Fuel Classification	Higher Heating Value (HHV)			CO_2 Emission Factor (EF)			CH_4 Emission Factor (EF)			N_2O Emission Factor		
		Value - HHV	Default - HHV	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units
Natural Gas	Fossil-gaseous	0.00102	1.028E-03	MMBtu/scf	53.02	53.02	kg/MMBtu	0.001	1.0E-03	kg/MMBtu	0.0001	1.0E-04	kg/MMBtu

Notes:

Default values for natural gas were obtained from the EPA Greenhouse Gas Reporting Rule (10/30/2009) Tables C-1 and C-2. Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

Annual GHG Calculation (By GHG Rule Eq. C-2a and C-2b)

Heat Input (MMBtu/hr)*	Heat Input (MMBtu/yr)	Fuel Use (scf/year)	Calculation Tier[a]	Hours of Operation (hrs/yr)
131.00	1,147,560	1.13E+09	Tier 1	8,760

Parameter	CO_2	CH_4	N_2O	TOTAL
EF[b] (kg/MMBtu)	53.02	0.001	0.0001	--
Estimated GHG Emissions (metric tons)	60,844	1.1476	0.11476	--
Estimated GHG Emissions (tons)	**67,069**	**1.2650**	**0.12650**	**--**
Global Warming Potential (GWP)[c] (kg CO_2e/kg)	1	25	298	--
Estimated GHG Emissions (metric tons CO_2e)	60,844	28.689	34.197	60,907
Estimated GHG Emissions (tons CO_2e)	**67,069**	**31.624**	**37.70**	**67,138**

Notes:

a) The default HHV value from Table C-1 of the EPA Greenhouse Gas Reporting Rule is substituted when no actual HHV data from fuel sampling is available. Use of the default HHV value constitutes the Tier 1 calculation method while use of HHV values obtained from fuel sampling constitutes Tier 2.

b) Emission factors (EF) for natural gas were obtained from Tables C-1 and C-2 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98). Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

c) Global warming potentials (GWP) were originally obtained from Table A-1 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98) - CO_2 - 1, CH_4 - 21 and N_2O - 310. The GWPs have been updated to reflect the GWPs presented in the IPCC Fourth Assessment Report, 2007.

Example Calculations

Estimated GHG Emissions (metric tons) = Fuel Use (scf/year) * Emission Factor (kg/MMBtu) * High Heat Value (MMBtu/scf) * 0.001 (metric tons/kg)

Estimated GHG Emissions (metric tons CO_2e) = Estimated GHG Emissions (metric tons) * Global Warming Potential (kg CO_2e/kg)

Estimated GHG Emissions (tons CO_2e) = Estimated GHG Emissions (metric tons CO_2e) * 1.10231

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential Regulated Air Pollutants - New HVAC/Heaters Supporting New Building Additions - Updated Final Engineering Design Heat Inputs

Combustion Equipment - Natural Gas

Emission Unit Description	Number of Units	Heat Input per Unit (MMBTU/hr)	Total Heat Input (MMBTU/hr)	Total Fuel Usage (MMscf/year)	Air Contaminant Emissions											
					$PM/PM_{10}/PM_{2.5}$		SO_2		NO_x		VOC		CO		Pb	
					lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
Rooftop Units																
Engine Assy Expansion	4	0.4	1.6	9.2	0.01	0.03	0.0009	0.003	0.16	0.46	0.01	0.03	0.13	0.39	7.84E-07	2.29E-06
Engine W/H Expansion	2	0.4	0.8	4.6	0.01	0.02	0.0005	0.001	0.08	0.23	0.00	0.01	0.07	0.19	3.92E-07	1.15E-06
Trim Warehouse Phase 1	5	0.4	2.0	11.5	0.01	0.04	0.0012	0.003	0.20	0.57	0.01	0.03	0.16	0.48	9.80E-07	2.87E-06
Trim Warehouse Phase 2	7	0.4	2.8	16.1	0.02	0.06	0.0016	0.005	0.27	0.80	0.02	0.04	0.23	0.67	1.37E-06	4.01E-06
Trim Warehouse Phase 3	7	0.4	2.8	16.1	0.02	0.06	0.0016	0.005	0.27	0.80	0.02	0.04	0.23	0.67	1.37E-06	4.01E-06
Body Warehouse	--	--	0.0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Body Service Warehouse	--	--	0.0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Stamping Warehouse 1	4	0.4	1.6	9.2	0.01	0.03	0.0009	0.003	0.16	0.46	0.01	0.03	0.13	0.39	7.84E-07	2.29E-06
Stamping Warehouse 2	--	--	0.0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Motor Pool Building	5	0.4	2.0	11.5	0.01	0.04	0.0012	0.003	0.20	0.57	0.01	0.03	0.16	0.48	9.80E-07	2.87E-06
Rooftop Units - Total		**--**	**13.60**	**77.97**	**0.10**	**0.30**	**0.01**	**0.02**	**1.33**	**3.90**	**0.07**	**0.21**	**1.12**	**3.27**	**6.67E-06**	**1.95E-05**
Heater Units																
Engine Assy Expansion	--	--	0.0	0.0	0.000	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Engine W/H Expansion	2	0.4	0.8	4.6	0.01	0.02	0.0005	0.001	0.08	0.23	0.00	0.01	0.07	0.19	3.92E-07	1.15E-06
Trim Warehouse Phase 1	3	0.4	1.2	6.9	0.01	0.03	0.0007	0.002	0.12	0.34	0.01	0.02	0.10	0.29	5.88E-07	1.72E-06
Trim Warehouse Phase 2	3	0.4	1.2	6.9	0.01	0.03	0.0007	0.002	0.12	0.34	0.01	0.02	0.10	0.29	5.88E-07	1.72E-06
Trim Warehouse Phase 3	4	0.4	1.6	9.2	0.01	0.03	0.0009	0.003	0.16	0.46	0.01	0.03	0.13	0.39	7.84E-07	2.29E-06
Body Warehouse	--	--	0.0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Body Service Warehouse	--	--	0.0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Stamping Warehouse 1	--	--	0.0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Stamping Warehouse 2	--	--	0.0	0.0	0.000	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Motor Pool Accessary Bldg.	2	0.4	0.8	4.6	0.01	0.02	0.0005	0.001	0.08	0.23	0.00	0.01	0.07	0.19	3.92E-07	1.15E-06
Heater Units - Total		**--**	**5.60**	**32.10**	**0.04**	**0.12**	**0.00**	**0.01**	**0.55**	**1.61**	**0.03**	**0.09**	**0.46**	**1.35**	**2.75E-06**	**8.03E-06**
HVAC & Heaters - Total		**--**	**19.20**	**110.07**	**0.14**	**0.42**	**0.01**	**0.03**	**1.88**	**5.50**	**0.10**	**0.30**	**1.58**	**4.62**	**9.41E-06**	**2.75E-05**

Equivalent Hours per Year - Natural Gas = 5,848

Each of the new and existing external combustion units associated with Paint line C are subject to a combined natural gas usage limit of 751 MMCF/yr. The 5,847.5 hours per year represents the equivalent of the usage limit.

Fuel Properties:

	Natural Gas	Units
Higher Heating Value	1,020	Btu/cf

CATEGORY	EMISSION FACTORS[1] (lb/MMscf)						EMISSION FACTORS[2] (lb/MMBtu)					
	$PM/PM_{10}/PM_{2.5}$	SO_2	NO_x	VOC	CO	Pb	$PM/PM_{10}/PM_{2.5}$	SO_2	Nox	VOC	CO	Pb
Natural Gas - < 100 MMBtu	7.6	0.6	100	5.5	84	0.0005	0.0075	0.0006	0.098	0.0054	0.0824	4.90E-07

Notes:

(1) Emission factors obtained from AP-42 Section 1.4, Natural Gas Combustion, 7/98. Factor for CO taken from Table 1.4-1 - Emission Factors for Carbon Monoxide (CO) from Natural Gas Combustion. Used Uncontrolled factor for Small Boilers (< 100). Factors for VOM, $PM/PM_{10}/PM_{2.5}$ and SO_2 taken from Table 1.4-2 - Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion. All PM (total, condensible, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM_{10} and $PM_{2.5}$.

(2) To convert lbs/MMscf to lbs/MMBtu, the lbs/MMscf emission factors were divided by 1,020.

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Heat Input Rate (lbs/MMBtu) * Emission Factor (lbs/MMBtu)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hrs/yr) / 2000

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential HAPs - New HVAC/Heaters Supporting New Building Additions - Updated Final Engineering Design Heat Inputs

Pollutant	HAP[(a)] Yes/No	Emission Factor (lb/MMBtu)[(b)]	Emission Factor Source	Estimated Potential Emissions (lb/hr)	Estimated Potential Emissions (tons/yr)
Formaldehyde	Yes	7.35E-05	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.41E-03**	**4.13E-03**
2-Methylnaphthalene	Yes	2.35E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**4.52E-07**	**1.32E-06**
3-Methylchloranthrene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**9.91E-08**
7,12-Dimethylbenz(a)anthracene	Yes	1.57E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.01E-07**	**8.81E-07**
Acenaphthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**9.91E-08**
Acenaphthylene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**9.91E-08**
Anthracene	Yes	2.35E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**4.52E-08**	**1.32E-07**
Arsenic	Yes	1.96E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**3.76E-06**	**1.10E-05**
Benz(a)anthracene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**9.91E-08**
Benz(a)pyrene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.26E-08**	**6.60E-08**
Benzene	Yes	2.06E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.95E-05**	**1.16E-04**
Benzo(b)fluoranthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**9.91E-08**
Benzo(g,h,i)perylene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.26E-08**	**6.60E-08**
Benzo(k)fluoranthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**9.91E-08**
Beryllium	Yes	1.18E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**2.26E-07**	**6.60E-07**
Cadmium	Yes	1.08E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**2.07E-05**	**6.05E-05**
Chromium	Yes	1.37E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**2.64E-05**	**7.70E-05**
Chrysene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**9.91E-08**
Cobalt	Yes	8.24E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**1.58E-06**	**4.62E-06**
Dibenzo(a,h)anthracene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.26E-08**	**6.60E-08**
Dichlorobenzene	Yes	1.18E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.26E-05**	**6.60E-05**
Fluoranthene	Yes	2.94E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**5.65E-08**	**1.65E-07**
Fluorene	Yes	2.75E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**5.27E-08**	**1.54E-07**
Hexane	**Yes**	**1.76E-03**	**AP-42 Nat. Gas Comb. (7/98), Table 1.4-3**	**3.39E-02**	**9.91E-02**
Indeno(1,2,3-cd)pyrene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**9.91E-08**
Manganese	Yes	3.73E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**7.15E-06**	**2.09E-05**
Mercury	Yes	2.55E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**4.89E-06**	**1.43E-05**
Naphthalene	Yes	5.98E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.15E-05**	**3.36E-05**
Nickel	Yes	2.06E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**3.95E-05**	**1.16E-04**
Phenanathrene	Yes	1.67E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.20E-07**	**9.36E-07**
Pyrene	Yes	4.90E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**9.41E-08**	**2.75E-07**
Selenium	Yes	2.35E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**4.52E-07**	**1.32E-06**
Toluene	Yes	3.33E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.40E-05**	**1.87E-04**
				Total (TPY)=	**0.104**

Equipment	Total Heat Input (MMBtu/hr)	*Hours of Operation (hrs/yr)
Natural Gas-Fired Combustion Sources - HVAC & Heaters	19.20	5,848
Total Heat Input =	**19.20**	
Pounds per Ton =	**2000**	

*Each of the new and existing external combustion units associated with Paint line C are subject to a combined natural gas usage limit of 751 MMCF/yr. The 5,847.5 hours per year represents the equivalent of the usage limit.

Shaded Cell is Highest Individual HAP Emission Rate

Notes:
(a) Regulated under Section 112(b) for Clean Air Act.
(b) Emission factors taken from AP-42, Chapter 1 - External Combustion Sources, Table 1.4-3 - Emission Factors for Speciated Organic Compounds from Natural Gas Combustion and Table 1.4-4 - Emission Factors for Metals from Natural Gas Combustion.

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Emission Factor (lbs/MMBtu) x Heat Input Rate (MMBtu/hr)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hours/year) / 2000 (lbs/ton)

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential Greenhouse Gases (GHGs) - New HVAC/Heaters Supporting New Building Additions - Updated Final Engineering Design Heat Inputs

Emission Factor Table

Fuel	Fuel Classification	Higher Heating Value (HHV)			CO_2 Emission Factor (EF)			CH_4 Emission Factor (EF)			N_2O Emission Factor		
		Value - HHV	Default - HHV	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units
Natural Gas	Fossil-gaseous	0.00102	1.028E-03	MMBtu/scf	53.02	53.02	kg/MMBtu	0.001	1.0E-03	kg/MMBtu	0.0001	1.0E-04	kg/MMBtu

Notes:

Default values for natural gas were obtained from the EPA Greenhouse Gas Reporting Rule (10/30/2009) Tables C-1 and C-2. Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

Annual GHG Calculation (By GHG Rule Eq. C-2a and C-2b)

Heat Input (MMBtu/hr)	Heat Input (MMBtu/yr)	Fuel Use (scf/year)	Calculation Tier[a]	*Hours of Operation (hrs/yr)
19.20	112,272	1.10E+08	Tier 1	5,848

*Each of the new and existing external combustion units associated with Paint line C are subject to a combined natural gas usage limit of 751 MMCF/yr. The 5,847.5 hours per year represents the equivalent of the usage limit.

Parameter	CO_2	CH_4	N_2O	TOTAL
EF[b] (kg/MMBtu)	53.02	0.001	0.0001	--
Estimated GHG Emissions (metric tons)	5,953	0.1123	0.01123	--
Estimated GHG Emissions (tons)	**6,562**	**0.1238**	**0.01238**	**--**
Global Warming Potential (GWP)[c] (kg CO_2e/kg)	1	25	298	--
Estimated GHG Emissions (metric tons CO_2e)	5,953	2.807	3.346	5,959
Estimated GHG Emissions (tons CO_2e)	**6,562**	**3.094**	**3.69**	**6,568**

Notes:

a) The default HHV value from Table C-1 of the EPA Greenhouse Gas Reporting Rule is substituted when no actual HHV data from fuel sampling is available. Use of the default HHV value constitutes the Tier 1 calculation method while use of HHV values obtained from fuel sampling constitutes Tier 2.

b) Emission factors (EF) for natural gas were obtained from Tables C-1 and C-2 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98). Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

c) Global warming potentials (GWP) were originally obtained from Table A-1 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98) - CO_2 - 1, CH_4 - 21 and N_2O - 310. The GWPs have been updated to reflect the GWPs presented in the IPCC Fourth Assessment Report, 2007.

Example Calculations

Estimated GHG Emissions (metric tons) = Fuel Use (scf/year) * Emission Factor (kg/MMBtu) * High Heat Value (MMBtu/scf) * 0.001 (metric tons/kg)

Estimated GHG Emissions (metric tons CO_2e) = Estimated GHG Emissions (metric tons) * Global Warming Potential (kg CO_2e/kg)

Estimated GHG Emissions (tons CO_2e) = Estimated GHG Emissions (metric tons CO_2e) * 1.10231

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Unlimited Potential Regulated Air Pollutants - New HVAC/Heaters Supporting New Building Additions - Updated Final Engineering Design Heat Inputs

Combustion Equipment - Natural Gas

Emission Unit Description	Number of Units	Heat Input per Unit (MMBTU/hr)	Total Heat Input (MMBTU/hr)	Total Fuel Usage (MMscf/year)	Air Contaminant Emissions											
					$PM/PM_{10}/PM_{2.5}$		SO_2		NO_x		VOC		CO		Pb	
					lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
Rooftop Units																
Engine Assy Expansion	4	0.4	1.6	13.7	0.01	0.05	0.0009	0.004	0.16	0.69	0.01	0.04	0.13	0.58	7.84E-07	3.44E-06
Engine W/H Expansion	2	0.4	0.8	6.9	0.01	0.03	0.0005	0.002	0.08	0.34	0.00	0.02	0.07	0.29	3.92E-07	1.72E-06
Trim Warehouse Phase 1	5	0.4	2	17.2	0.01	0.07	0.0012	0.005	0.20	0.86	0.01	0.05	0.16	0.72	9.80E-07	4.29E-06
Trim Warehouse Phase 2	7	0.4	2.8	24.0	0.02	0.09	0.0016	0.007	0.27	1.20	0.02	0.07	0.23	1.01	1.37E-06	6.01E-06
Trim Warehouse Phase 3	7	0.4	2.8	24.0	0.02	0.09	0.0016	0.007	0.27	1.20	0.02	0.07	0.23	1.01	1.37E-06	6.01E-06
Body Warehouse	--	--	0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Body Service Warehouse	--	--	0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Stamping Warehouse 1	4	0.4	1.6	13.7	0.01	0.05	0.0009	0.004	0.16	0.69	0.01	0.04	0.13	0.58	7.84E-07	3.44E-06
Stamping Warehouse 2	--	--	0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Motor Pool Building	5	0.4	2	17.2	0.01	0.07	0.0012	0.005	0.20	0.86	0.01	0.05	0.16	0.72	9.80E-07	4.29E-06
Rooftop Units - Total		**--**	**13.60**	**116.80**	**0.10**	**0.44**	**0.01**	**0.04**	**1.33**	**5.84**	**0.07**	**0.32**	**1.12**	**4.91**	**6.67E-06**	**2.92E-05**
Heater Units																
Engine Assy Expansion	--	--	0	0.0	0.000	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Engine W/H Expansion	2	0.4	0.8	6.9	0.01	0.03	0.0005	0.002	0.08	0.34	0.00	0.02	0.07	0.29	3.92E-07	1.72E-06
Trim Warehouse Phase 1	3	0.4	1.2	10.3	0.01	0.04	0.0007	0.003	0.12	0.52	0.01	0.03	0.10	0.43	5.88E-07	2.58E-06
Trim Warehouse Phase 2	3	0.4	1.2	10.3	0.01	0.04	0.0007	0.003	0.12	0.52	0.01	0.03	0.10	0.43	5.88E-07	2.58E-06
Trim Warehouse Phase 3	4	0.4	1.6	13.7	0.01	0.05	0.0009	0.004	0.16	0.69	0.01	0.04	0.13	0.58	7.84E-07	3.44E-06
Body Warehouse	--	--	0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Body Service Warehouse	--	--	0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Stamping Warehouse 1	--	--	0	0.0	0.00	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Stamping Warehouse 2	--	--	0	0.0	0.000	0.00	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00	0.00E+00
Motor Pool Accessary Bldg.	2	0.4	0.8	6.9	0.006	0.03	0.0005	0.002	0.08	0.34	0.00	0.02	0.07	0.29	3.92E-07	1.72E-06
Heater Units - Total		**--**	**5.60**	**48.09**	**0.04**	**0.18**	**0.00**	**0.01**	**0.55**	**2.40**	**0.03**	**0.13**	**0.46**	**2.02**	**2.75E-06**	**1.20E-05**
HVAC & Heaters - Total		**--**	**19.20**	**164.89**	**0.14**	**0.63**	**0.01**	**0.05**	**1.88**	**8.24**	**0.10**	**0.45**	**1.58**	**6.93**	**9.41E-06**	**4.12E-05**

Maximum Hours per Year - Natural Gas = 8,760 hours/year

Fuel Properties:

	Natural Gas	Units
Higher Heating Value	1,020	Btu/cf

CATEGORY	EMISSION FACTORS[1] (lb/MMscf)						EMISSION FACTORS[2] (lb/MMBtu)					
	$PM/PM_{10}/PM_{2.5}$	SO_2	NO_x	VOC	CO	Pb	$PM/PM_{10}/PM_{2.5}$	SO_2	Nox	VOC	CO	Pb
Natural Gas - < 100 MMBtu	7.6	0.6	100	5.5	84	0.0005	0.0075	0.0006	0.098	0.0054	0.0824	4.90E-07

Notes:

(1) Emission factors obtained from AP-42 Section 1.4, Natural Gas Combustion, 7/98. Factors for CO taken from Table 1.4-1 - Emission Factors for Nitrogen Oxides (NOx) and Carbon Monoxide (CO) from Natural Gas Combustion, Low NOx Burners. Used Uncontrolled factor for Small Boilers (< 100). Factors for VOM, $PM/PM_{10}/PM_{2.5}$ and SO_2 taken from Table 1.4-2 - Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion. All PM (total, condensible, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM_{10} and $PM_{2.5}$.

(2) To convert lbs/MMscf to lbs/MMBtu, the lbs/MMscf emission factors were divided by 1,020.

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Heat Input Rate (lbs/MMBtu) * Emission Factor (lbs/MMBtu)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hrs/yr) / 2000

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Unlimited Potential HAPs - New HVAC/Heaters Supporting New Building Additions - Updated Final Engineering Design Heat Inputs

Pollutant	HAP[a] Yes/No	Emission Factor (lb/MMBtu)[b]	Emission Factor Source	Estimated Potential Emissions (lb/hr)	Estimated Potential Emissions (tons/yr)
Formaldehyde	Yes	7.35E-05	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.41E-03**	**6.18E-03**
2-Methylnaphthalene	Yes	2.35E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**4.52E-07**	**1.98E-06**
3-Methylchloranthrene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**1.48E-07**
7,12-Dimethylbenz(a)anthracene	Yes	1.57E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.01E-07**	**1.32E-06**
Acenaphthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**1.48E-07**
Acenaphthylene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**1.48E-07**
Anthracene	Yes	2.35E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**4.52E-08**	**1.98E-07**
Arsenic	Yes	1.96E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**3.76E-06**	**1.65E-05**
Benz(a)anthracene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**1.48E-07**
Benz(a)pyrene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.26E-08**	**9.89E-08**
Benzene	Yes	2.06E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.95E-05**	**1.73E-04**
Benzo(b)fluoranthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**1.48E-07**
Benzo(g,h,i)perylene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.26E-08**	**9.89E-08**
Benzo(k)fluoranthene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**1.48E-07**
Beryllium	Yes	1.18E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**2.26E-07**	**9.89E-07**
Cadmium	Yes	1.08E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**2.07E-05**	**9.07E-05**
Chromium	Yes	1.37E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**2.64E-05**	**1.15E-04**
Chrysene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**1.48E-07**
Cobalt	Yes	8.24E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**1.58E-06**	**6.93E-06**
Dibenzo(a,h)anthracene	Yes	1.18E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.26E-08**	**9.89E-08**
Dichlorobenzene	Yes	1.18E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**2.26E-05**	**9.89E-05**
Fluoranthene	Yes	2.94E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**5.65E-08**	**2.47E-07**
Fluorene	Yes	2.75E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**5.27E-08**	**2.31E-07**
Hexane	**Yes**	**1.76E-03**	**AP-42 Nat. Gas Comb. (7/98), Table 1.4-3**	**3.39E-02**	**1.48E-01**
Indeno(1,2,3-cd)pyrene	Yes	1.76E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.39E-08**	**1.48E-07**
Manganese	Yes	3.73E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**7.15E-06**	**3.13E-05**
Mercury	Yes	2.55E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**4.89E-06**	**2.14E-05**
Naphthalene	Yes	5.98E-07	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**1.15E-05**	**5.03E-05**
Nickel	Yes	2.06E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**3.95E-05**	**1.73E-04**
Phenanathrene	Yes	1.67E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**3.20E-07**	**1.40E-06**
Pyrene	Yes	4.90E-09	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**9.41E-08**	**4.12E-07**
Selenium	Yes	2.35E-08	AP-42 Nat. Gas Comb. (7/98), Table 1.4-4	**4.52E-07**	**1.98E-06**
Toluene	Yes	3.33E-06	AP-42 Nat. Gas Comb. (7/98), Table 1.4-3	**6.40E-05**	**2.80E-04**
				Total (TPY)=	**0.156**

Equipment	Total Heat Input (MMBtu/hr)*	Hours of Operation (hrs/yr)
Natural Gas-Fired Combustion Sources - HVAC & Heaters	19.20	8,760
Total Heat Input =	**19.20**	
Pounds per Ton =	**2000**	

Shaded Cell is Highest Individual HAP Emission Rate

Notes:
(a) Regulated under Section 112(b) for Clean Air Act.
(b) Emission factors taken from AP-42, Chapter 1 - External Combustion Sources, Table 1.4-3 - Emission Factors for Speciated Organic Compounds from Natural Gas Combustion and Table 1.4-4 - Emission Factors for Metals from Natural Gas Combustion.

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Emission Factor (lbs/MMBtu) x Heat Input Rate (MMBtu/hr)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hours/year) / 2000 (lbs/ton)

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Unlimited Potential Greenhouse Gases (GHGs) - New HVAC/Heaters Supporting New Building Additions - Updated Final Engineering Design Heat Inputs

Emission Factor Table

Fuel	Fuel Classification	Higher Heating Value (HHV)			CO_2 Emission Factor (EF)			CH_4 Emission Factor (EF)			N_2O Emission Factor		
		Value - HHV	Default - HHV	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units	Value - EF	Default - EF	Units
Natural Gas	Fossil-gaseous	1020	1.028E-03	MMBtu/scf	53.02	53.02	kg/MMBtu	0.001	1.0E-03	kg/MMBtu	0.0001	1.0E-04	kg/MMBtu

Notes:

Default values for natural gas were obtained from the EPA Greenhouse Gas Reporting Rule (10/30/2009) Tables C-1 and C-2. Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

Annual GHG Calculation (By GHG Rule Eq. C-2a and C-2b)

Heat Input (MMBtu/hr)	Heat Input (MMBtu/yr)	Fuel Use (scf/year)	Calculation Tier[a]	Hours of Operation (hrs/yr)
19.20	168,192	1.65E+08	Tier 1	8,760

Parameter	CO_2	CH_4	N_2O	TOTAL
EF[b] (kg/MMBtu)	53.02	0.001	0.0001	--
Estimated GHG Emissions (metric tons)	8,917,539,840	168192.0000	16819.20000	--
Estimated GHG Emissions (tons)	**9829893341.03**	**185399.72**	**18539.97**	**--**
Global Warming Potential (GWP)[c] (kg CO_2e/kg)	1	25	298	--
Estimated GHG Emissions (metric tons CO_2e)	8,917,539,840	4204800.000	5012121.600	8,926,756,762
Estimated GHG Emissions (tons CO_2e)	**9,829,893,341**	**4634993.088**	**5,524,911.76**	**9,840,053,246**

Notes:

a) The default HHV value from Table C-1 of the EPA Greenhouse Gas Reporting Rule is substituted when no actual HHV data from fuel sampling is available. Use of the default HHV value constitutes the Tier 1 calculation method while use of HHV values obtained from fuel sampling constitutes Tier 2.

b) Emission factors (EF) for natural gas were obtained from Tables C-1 and C-2 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98). Table C-1 - Default CO_2 Emission Factors and High Heat Values for Various Types of Fuel. Table C-2 - Default CH_4 and N_2O Emission Factors for Various Types of Fuel.

c) Global warming potentials (GWP) were originally obtained from Table A-1 of the EPA Greenhouse Gas Reporting Rule (40 CFR 98) - CO_2 - 1, CH_4 - 21 and N_2O - 310. The GWPs have been updated to reflect the GWPs presented in the IPCC Fourth Assessment Report, 2007.

Example Calculations

Estimated GHG Emissions (metric tons) = Fuel Use (scf/year) * Emission Factor (kg/MMBtu) * High Heat Value (MMBtu/scf) * 0.001 (metric tons/kg)
Estimated GHG Emissions (metric tons CO_2e) = Estimated GHG Emissions (metric tons) * Global Warming Potential (kg CO_2e/kg)
Estimated GHG Emissions (tons CO_2e) = Estimated GHG Emissions (metric tons CO_2e) * 1.10231

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential Emissions of Regulated Air Pollutants from Emergency Generator (Criteria Air Pollutants)

Emergency Generator - Natural Gas

Description	Rating (KW)	Rating (HP)	Rating MMBtu/hr	Air Contaminant Emissions											
				$PM/PM_{10}/PM_{2.5}$		SO_2		NO_x		VOC		CO		CO_2	
				lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
Emergency Generator - 2-Stroke Lean-Burn Engines	400	636	4.800	0.18	0.046	0.0028	0.00071	2.80	0.70	1.40	0.35	5.60	1.40	528.00	132.00
Emergency Generator - 4-Stroke Lean-Burn Engines	400	636	4.800	0.0004	0.00009	0.0028	0.00071	2.80	0.70	1.40	0.35	5.60	1.40	528.00	132.00
Totals				**0.18**	**0.046**	**0.003**	**0.0007**	**2.80**	**0.70**	**1.40**	**0.35**	**5.60**	**1.40**	**528.00**	**132.00**

Maximum Hours per Year - Natural Gas = 500 hours/year

Natural Gas Combustion Emission Factors - AP-42

CATEGORY	EMISSION FACTORS (lbs/MMBtu)*					
	$PM/PM_{10}/PM_{2.5}$	SO_2	NO_x (90-105% Load)	VOC	CO (90-105% Load)	CO_2
2-Stroke Lean-Burn Engines	0.0384	0.000588	3.17	0.12	0.386	110
4-Stroke Lean-Burn Engines	0.0000771	0.000588	4.08	0.118	0.317	110

Note:
*Emission factors from AP-42, Chapter 3.2 - Natural Gas-fired Reciprocating Engines
Table 3.2-1 - Uncontrolled Emission Factors for 2-Stroke Lean-Burn Engines (SCC 2-02-002-52)
Table 3.2-2 - Uncontrolled Emission Factors for 4-Stroke Lean-Burn Engines (SCC 2-02-002-52)

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Heat Input Rate (lbs/MMBtu) * Emission Factor (lbs/MMBtu)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hrs/yr) / 2000 lbs/ton

Natural Gas Combustion Emission Factors - 40 CFR Part 60, Subpart JJJJ

CATEGORY	EMISSION FACTORS (g/HP-hr)**			EMISSION FACTORS (lb/HP-hr)**		
	NO_x	VOC	CO	NO_x	VOC	CO
Stationary Emergency Engines >25 HP	2.00	1.00	4.000	0.004	0.002	0.009

** Emission factors from Table 1 to Subpart JJJJ of Part 60—NOX, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Heat Input Rate (lbs/HP) * Emission Factor (lbs/HP-hr)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hrs/yr) / 2000 lbs/ton

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Limited Potential Emissions of Regulated Air Pollutants from Natural Gas Combustion - Emergency Generator (Hazardous Air Pollutants)

Pollutant	HAP* Yes/No	Emission Factor (lb/MMBtu)	Emission Factor Source	Estimated Potential Uncontrolled Emissions (lb/hr)	Estimated Potential Uncontrolled Emissions (tons/yr)
1,1,2,2-Tetrachloroethane	Yes	6.63E-05	AP-42, Chapter 3.2, Table 3.2-1	**3.18E-04**	**7.96E-05**
1,1,2-Trichloroethane	Yes	5.27E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.53E-04**	**6.32E-05**
1,3-Butadiene	Yes	8.20E-04	AP-42, Chapter 3.2, Table 3.2-1	**3.94E-03**	**9.84E-04**
1,3-Dichloropropene	Yes	4.38E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.10E-04**	**5.26E-05**
2,2,4-Trimethylpentane	Yes	8.46E-04	AP-42, Chapter 3.2, Table 3.2-1	**4.06E-03**	**1.02E-03**
2-Methylnaphthalene	Yes	2.14E-05	AP-42, Chapter 3.2, Table 3.2-1	**1.03E-04**	**2.57E-05**
Acenaphthene	Yes	1.33E-06	AP-42, Chapter 3.2, Table 3.2-1	**6.38E-06**	**1.60E-06**
Acenaphthylene	Yes	3.17E-06	AP-42, Chapter 3.2, Table 3.2-1	**1.52E-05**	**3.80E-06**
Acetaldehyde	Yes	7.76E-03	AP-42, Chapter 3.2, Table 3.2-1	**3.72E-02**	**9.31E-03**
Acrolein	Yes	7.78E-03	AP-42, Chapter 3.2, Table 3.2-1	**3.73E-02**	**9.34E-03**
Anthracene	Yes	7.18E-07	AP-42, Chapter 3.2, Table 3.2-1	**3.45E-06**	**8.62E-07**
Benz(a)anthracene	Yes	3.36E-07	AP-42, Chapter 3.2, Table 3.2-1	**1.61E-06**	**4.03E-07**
Benzene	Yes	1.94E-03	AP-42, Chapter 3.2, Table 3.2-1	**9.31E-03**	**2.33E-03**
Benzo(a)pyrene	Yes	5.68E-09	AP-42, Chapter 3.2, Table 3.2-1	**2.73E-08**	**6.82E-09**
Benzo(b)fluoranthene	Yes	8.51E-09	AP-42, Chapter 3.2, Table 3.2-1	**4.08E-08**	**1.02E-08**
Benzo(e)pyrene	Yes	2.34E-08	AP-42, Chapter 3.2, Table 3.2-1	**1.12E-07**	**2.81E-08**
Benzo(g,h,i)perylene	Yes	2.48E-08	AP-42, Chapter 3.2, Table 3.2-1	**1.19E-07**	**2.98E-08**
Benzo(k)fluoranthene	Yes	4.26E-09	AP-42, Chapter 3.2, Table 3.2-1	**2.04E-08**	**5.11E-09**
Biphenyl	Yes	3.95E-06	AP-42, Chapter 3.2, Table 3.2-1	**1.90E-05**	**4.74E-06**
Carbon Tetrachloride	Yes	6.07E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.91E-04**	**7.28E-05**
Chlorobenzene	Yes	4.44E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.13E-04**	**5.33E-05**
Chloroform	Yes	4.71E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.26E-04**	**5.65E-05**
Chrysene	Yes	6.72E-07	AP-42, Chapter 3.2, Table 3.2-1	**3.23E-06**	**8.06E-07**
Ethylbenzene	Yes	1.08E-04	AP-42, Chapter 3.2, Table 3.2-1	**5.18E-04**	**1.30E-04**
Ethylene Dibromide	Yes	7.34E-05	AP-42, Chapter 3.2, Table 3.2-1	**3.52E-04**	**8.81E-05**
Fluoranthene	Yes	3.61E-07	AP-42, Chapter 3.2, Table 3.2-1	**1.73E-06**	**4.33E-07**
Fluorene	Yes	1.69E-06	AP-42, Chapter 3.2, Table 3.2-1	**8.11E-06**	**2.03E-06**
Formaldehyde	**Yes**	**5.52E-02**	**AP-42, Chapter 3.2, Table 3.2-1**	**2.65E-01**	**6.62E-02**
Indeno(1,2,3-c,d)pyrene	Yes	9.93E-09	AP-42, Chapter 3.2, Table 3.2-1	**4.77E-08**	**1.19E-08**
Methanol	Yes	2.48E-03	AP-42, Chapter 3.2, Table 3.2-1	**1.19E-02**	**2.98E-03**
Methylene Chloride	Yes	1.47E-04	AP-42, Chapter 3.2, Table 3.2-1	**7.06E-04**	**1.76E-04**
n-Hexane	Yes	4.45E-04	AP-42, Chapter 3.2, Table 3.2-1	**2.14E-03**	**5.34E-04**
Naphthalene	Yes	9.63E-05	AP-42, Chapter 3.2, Table 3.2-1	**4.62E-04**	**1.16E-04**
PAH	Yes	1.34E-04	AP-42, Chapter 3.2, Table 3.2-1	**6.43E-04**	**1.61E-04**
Perylene	Yes	4.97E-09	AP-42, Chapter 3.2, Table 3.2-1	**2.39E-08**	**5.96E-09**
Phenanthrene	Yes	3.53E-06	AP-42, Chapter 3.2, Table 3.2-1	**1.69E-05**	**4.24E-06**
Phenol	Yes	4.21E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.02E-04**	**5.05E-05**
Pyrene	Yes	5.84E-07	AP-42, Chapter 3.2, Table 3.2-1	**2.80E-06**	**7.01E-07**
Styrene	Yes	5.48E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.63E-04**	**6.58E-05**
Toluene	Yes	9.63E-04	AP-42, Chapter 3.2, Table 3.2-1	**4.62E-03**	**1.16E-03**
Vinyl Chloride	Yes	2.47E-05	AP-42, Chapter 3.2, Table 3.2-1	**1.19E-04**	**2.96E-05**
Xylene	Yes	2.68E-04	AP-42, Chapter 3.2, Table 3.2-1	**1.29E-03**	**3.22E-04**
				Total (TPY)=	**0.095**

Equipment	Rating (MMBtu/hr)	Hours of Operation * (hrs/yr)
Natural Gas-Fired Emergency Generator - 2-Stroke Lean-Burn Engines	4.8	500
Total	**4.8**	

Notes:
*Regulated under Section 112(b) for Clean Air Act
**Emission factors from AP-42, Chapter 3.2 - Natural Gas-fired Reciprocating Engines, Table 3.2-1 - Uncontrolled Emission Factors for 2-Stroke Lean-Burn Engines (SCC 2-02-002-52)

= Individual HAP with the highest emission rate

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Emission Factor (lbs/MMBtu) * Heat Input Rate (MMBtu/hr)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) * Hours of Operation / 2000

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Unlimited Potential Emissions of Regulated Air Pollutants from Emergency Generator (Criteria Air Pollutants)

Emergency Generator - Natural Gas

Description	Rating (KW)	Rating (HP)	Rating MMBtu/hr	Air Contaminant Emissions											
				$PM/PM_{10}/PM_{2.5}$		SO_2		NO_x		VOC		CO		CO_2	
				lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
Emergency Generator - 2-Stroke Lean-Burn Engines	400	620	4.800	0.18	0.046	0.0028	0.0007	2.73	0.68	1.37	0.34	5.46	1.37	528.00	132.00
Emergency Generator - 4-Stroke Lean-Burn Engines	400	620	4.800	0.0004	0.00009	0.0028	0.00071	2.73	0.68	1.37	0.34	5.46	1.37	528.00	132.00
Totals				**0.18**	**0.046**	**0.003**	**0.0007**	**2.73**	**0.68**	**1.37**	**0.34**	**5.46**	**1.37**	**528.00**	**132.00**

Maximum Hours per Year - Natural Gas* = 500 hours/year

*Maximum hourrs of operation based on EPA guidance document "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995. The EPA believes that 500 hours is an appropriate default assumption for estimating the number of hours that an emergency generator could be expected to operate under worst-case conditions.

Natural Gas Combustion Emission Factors - AP-42

CATEGORY	EMISSION FACTORS (lbs/MMBtu)*					
	$PM/PM_{10}/PM_{2.5}$	SO_2	NO_x (90-105% Load)	VOC	CO (90-105% Load)	CO_2
2-Stroke Lean-Burn Engines	0.0384	0.000588	3.17	0.12	0.386	110
4-Stroke Lean-Burn Engines	0.0000771	0.000588	4.08	0.118	0.317	110

Note:
*Emission factors from AP-42, Chapter 3.2 - Natural Gas-fired Reciprocating Engines
Table 3.2-1 - Uncontrolled Emission Factors for 2-Stroke Lean-Burn Engines (SCC 2-02-002-52)
Table 3.2-2 - Uncontrolled Emission Factors for 4-Stroke Lean-Burn Engines (SCC 2-02-002-52)
Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Heat Input Rate (lbs/MMBtu) * Emission Factor (lbs/MMBtu)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hrs/yr) / 2000 lbs/ton

Natural Gas Combustion Emission Factors - 40 CFR Part 60, Subpart JJJJ

CATEGORY	EMISSION FACTORS (g/HP-hr)**			EMISSION FACTORS (lb/HP-hr)**		
	NO_x	VOC	CO	NO_x	VOC	CO
Stationary Emergency Engines >25 HP	2.00	1.00	4.000	0.004	0.002	0.009

** Emission factors from Table 1 to Subpart JJJJ of Part 60—NOX, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Heat Input Rate (lbs/MMBtu) * Emission Factor (lbs/MMBtu)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) x Hours of Operation (hrs/yr) / 2000 lbs/ton

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Estimated Unlimited Potential Emissions of Regulated Air Pollutants from Natural Gas Combustion - Emergency Generator (Hazardous Air Pollutants)

Pollutant	HAP* Yes/No	Emission Factor (lb/MMBtu)	Emission Factor Source	Estimated Potential Uncontrolled Emissions (lb/hr)	Estimated Potential Uncontrolled Emissions (tons/yr)
1,1,2,2-Tetrachloroethane	Yes	6.63E-05	AP-42, Chapter 3.2, Table 3.2-1	**3.18E-04**	**7.96E-05**
1,1,2-Trichloroethane	Yes	5.27E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.53E-04**	**6.32E-05**
1,3-Butadiene	Yes	8.20E-04	AP-42, Chapter 3.2, Table 3.2-1	**3.94E-03**	**9.84E-04**
1,3-Dichloropropene	Yes	4.38E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.10E-04**	**5.26E-05**
2,2,4-Trimethylpentane	Yes	8.46E-04	AP-42, Chapter 3.2, Table 3.2-1	**4.06E-03**	**1.02E-03**
2-Methylnaphthalene	Yes	2.14E-05	AP-42, Chapter 3.2, Table 3.2-1	**1.03E-04**	**2.57E-05**
Acenaphthene	Yes	1.33E-06	AP-42, Chapter 3.2, Table 3.2-1	**6.38E-06**	**1.60E-06**
Acenaphthylene	Yes	3.17E-06	AP-42, Chapter 3.2, Table 3.2-1	**1.52E-05**	**3.80E-06**
Acetaldehyde	Yes	7.76E-03	AP-42, Chapter 3.2, Table 3.2-1	**3.72E-02**	**9.31E-03**
Acrolein	Yes	7.78E-03	AP-42, Chapter 3.2, Table 3.2-1	**3.73E-02**	**9.34E-03**
Anthracene	Yes	7.18E-07	AP-42, Chapter 3.2, Table 3.2-1	**3.45E-06**	**8.62E-07**
Benz(a)anthracene	Yes	3.36E-07	AP-42, Chapter 3.2, Table 3.2-1	**1.61E-06**	**4.03E-07**
Benzene	Yes	1.94E-03	AP-42, Chapter 3.2, Table 3.2-1	**9.31E-03**	**2.33E-03**
Benzo(a)pyrene	Yes	5.68E-09	AP-42, Chapter 3.2, Table 3.2-1	**2.73E-08**	**6.82E-09**
Benzo(b)fluoranthene	Yes	8.51E-09	AP-42, Chapter 3.2, Table 3.2-1	**4.08E-08**	**1.02E-08**
Benzo(e)pyrene	Yes	2.34E-08	AP-42, Chapter 3.2, Table 3.2-1	**1.12E-07**	**2.81E-08**
Benzo(g,h,i)perylene	Yes	2.48E-08	AP-42, Chapter 3.2, Table 3.2-1	**1.19E-07**	**2.98E-08**
Benzo(k)fluoranthene	Yes	4.26E-09	AP-42, Chapter 3.2, Table 3.2-1	**2.04E-08**	**5.11E-09**
Biphenyl	Yes	3.95E-06	AP-42, Chapter 3.2, Table 3.2-1	**1.90E-05**	**4.74E-06**
Carbon Tetrachloride	Yes	6.07E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.91E-04**	**7.28E-05**
Chlorobenzene	Yes	4.44E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.13E-04**	**5.33E-05**
Chloroform	Yes	4.71E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.26E-04**	**5.65E-05**
Chrysene	Yes	6.72E-07	AP-42, Chapter 3.2, Table 3.2-1	**3.23E-06**	**8.06E-07**
Ethylbenzene	Yes	1.08E-04	AP-42, Chapter 3.2, Table 3.2-1	**5.18E-04**	**1.30E-04**
Ethylene Dibromide	Yes	7.34E-05	AP-42, Chapter 3.2, Table 3.2-1	**3.52E-04**	**8.81E-05**
Fluoranthene	Yes	3.61E-07	AP-42, Chapter 3.2, Table 3.2-1	**1.73E-06**	**4.33E-07**
Fluorene	Yes	1.69E-06	AP-42, Chapter 3.2, Table 3.2-1	**8.11E-06**	**2.03E-06**
Formaldehyde	**Yes**	**5.52E-02**	**AP-42, Chapter 3.2, Table 3.2-1**	**2.65E-01**	**6.62E-02**
Indeno(1,2,3-c,d)pyrene	Yes	9.93E-09	AP-42, Chapter 3.2, Table 3.2-1	**4.77E-08**	**1.19E-08**
Methanol	Yes	2.48E-03	AP-42, Chapter 3.2, Table 3.2-1	**1.19E-02**	**2.98E-03**
Methylene Chloride	Yes	1.47E-04	AP-42, Chapter 3.2, Table 3.2-1	**7.06E-04**	**1.76E-04**
n-Hexane	Yes	4.45E-04	AP-42, Chapter 3.2, Table 3.2-1	**2.14E-03**	**5.34E-04**
Naphthalene	Yes	9.63E-05	AP-42, Chapter 3.2, Table 3.2-1	**4.62E-04**	**1.16E-04**
PAH	Yes	1.34E-04	AP-42, Chapter 3.2, Table 3.2-1	**6.43E-04**	**1.61E-04**
Perylene	Yes	4.97E-09	AP-42, Chapter 3.2, Table 3.2-1	**2.39E-08**	**5.96E-09**
Phenanthrene	Yes	3.53E-06	AP-42, Chapter 3.2, Table 3.2-1	**1.69E-05**	**4.24E-06**
Phenol	Yes	4.21E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.02E-04**	**5.05E-05**
Pyrene	Yes	5.84E-07	AP-42, Chapter 3.2, Table 3.2-1	**2.80E-06**	**7.01E-07**
Styrene	Yes	5.48E-05	AP-42, Chapter 3.2, Table 3.2-1	**2.63E-04**	**6.58E-05**
Toluene	Yes	9.63E-04	AP-42, Chapter 3.2, Table 3.2-1	**4.62E-03**	**1.16E-03**
Vinyl Chloride	Yes	2.47E-05	AP-42, Chapter 3.2, Table 3.2-1	**1.19E-04**	**2.96E-05**
Xylene	Yes	2.68E-04	AP-42, Chapter 3.2, Table 3.2-1	**1.29E-03**	**3.22E-04**
				Total (TPY)=	**0.095**

Equipment	Rating (MMBtu/hr)	Hours of Operation * (hrs/yr)
Natural Gas-Fired Emergency Generator - 2-Stroke Lean-Burn Engines	4.8	500
Total	**4.8**	

* The sourcewide natural gas usage is limited to 2,380 MMCF/yr.

Notes:
*Regulated under Section 112(b) for Clean Air Act
**Emission factors from AP-42, Chapter 3.2 - Natural Gas-fired Reciprocating Engines, Table 3.2-1 - Uncontrolled Emission Factors for 2-Stroke Lean-Burn Engines (SCC 2-02-002-52)

= Individual HAP with the highest emission rate

Example Calculations
Estimated Uncontrolled Emissions (lbs/hr) = Emission Factor (lbs/MMBtu) * Heat Input Rate (MMBtu/hr)
Estimated Uncontrolled Emissions (tons/yr) = Estimated Uncontrolled Emissions (lbs/hr) * Hours of Operation / 2000

Company Name: Subaru of Indiana Automotive, Inc.
Source Address: 5500 State Road 38 East, Lafayette, Indiana 47905
PSD/SSM No.: 157-36379-00050
Part 70 Renewal No.: T157-36402-00050
Reviewer: Aida DeGuzman

Plant A/B PM/PM10 EMISSIONS LIMITATION
Note: PM/PM10 emissions limit was established and required when the initial Part 70 Operating Permit No T157-5906-00050 was issued on June 28, 2004.

Information:
Assume PM = PM10

Actual Production in 1993	=	131,122	vehicles
Actual Production in 1994	=	164,611	vehicles
Actual Production in 1997	=	187,096	vehicles
Actual PM Emissions in 1997	=	12	tons PM/PM10
Actual Production in 1998	=	216,217	vehicles
Actual PM Emissions in 1998	=	10	tons PM/PM10

Calculations

Actual emissions were not available for 1993 and 1994. Therefore the average pounds of PM10 per vehicle was determined using the two closest years in which actual emissions were available, 1997 and 1998.

1997-1998 Actual Emissions = Actual 1997 Emissions + Actual 1998 Emissions
= 22 tons PM/PM10
1997-1998 Actual Production = Actual 1997 Production + Actual 1998 Production
= 403,313 vehicles
1997-1998 Average Actual Emission Rate = (1997-1998 Actual Emissions / 1997-1998 Actual Production) x 2000 lb/ton
= 0.109 lb PM/PM10 per vehicle

1993-1994 Average Actual Production = (Actual 1993 Production + Actual 1994 Production) / 2
= 147,867 vehicles per year

1993-1994 Actual Emissions = 1993-1994 Average Actual Production x 1997-1998 Average Actual Emission Rate x 1/2000 ton/lb
= **8.1 tons PM/PM10 per year**

Therefore:
Potential to Emit Limitation (tons PM/PM10) = Average Actual Emissions of Existing Plant (tons PM/PM10) + Net Change in Emissions (tons PM/PM10)

Net Change in Emissions must be less than the relevant PSD threshold of **15 tons of PM10 per year.**

Therefore:

Sourcewide PM/PM10 Emissions Limitation = 23.1 tons PM/PM10 per year

APPENDIX D

CONTROL TECHNOLOGY / PSD BACT ANALYSIS

Source Name: Subaru of Indiana Automotive, Inc.
Source Location: 5500 State Road 38 East, Lafayette, Indiana 47905
County: Tippecanoe
SIC Code: 3711
PSD/Significant Source Modification No.:157-36379-00050
Part 70 Operating Permit Renewal No.: T157-36402-00050
Permit Reviewer: Aida De Guzman

Subaru of Indiana Automotive, Inc. (SIA) was issued PSD/SSM 157-33759-00050 on May 19, 2014 for the construction of a new Paint Line System C along with various natural gas combustion units that will support this new paint coating line. PSD/SSM 157-34774-00050 was issued on December 23, 2014 allowing Subaru to install combustion units of different heat input ratings than originally permitted in PSD/SSM 157-33759-00050. Subaru has subsequently proposed to add new combustion emission units instead of the combustion emission units originally permitted in those PSD permits. Therefore, the proposed new combustion units in this permitting action, PSD/SSM157-36379-00050, are being aggregated with the PSD Project Paint Line "C", originally permitted in PSD/SSM 157-33759-00050 and PSD/SSM 157-34774-00050, since they are part of that project.

Pursuant to 326 IAC 2-2-3 (Control technology review; requirements), a major modification shall apply best available control technology for each regulated NSR pollutant for which the modification would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit that has an increased heat input rating and for the proposed new units.

The following natural gas combustion units are subject to BACT re-evaluation:

Combustion Emission Unit/ID	**Heat Input as Permitted in the original PSD/SSM 157-33759-00050 or PSD/SSM 157-34774-00050 (MMBtu/hr)**	**Heat Input Based on Final Engineering Design (MMBtu/hr)**
PVC Sealer Oven	3.0	3.5
Intermediate (Surfacer) Oven	10.0	10.1
Intermediate (Surfacer) Air House	21.6	26.5
Topcoat Air House	38.0	42.0
Working Stage Air House #1 - Prep Deck, Off Line Areas	9.5	11.0
Working Stage Air House #2- Inspection, Touch-Up Area	6.5	11.0
HCU-14-1 Pretreatment Roof	0.77	0.8337

Combustion Emission Unit/ID	Heat Input as Permitted in the original PSD/SSM 157-33759-00050 or PSD/SSM 157-34774-00050 (MMBtu/hr)	Heat Input Based on Final Engineering Design (MMBtu/hr)
HCU-14-2 Pretreatment Roof	0.77	0.8337
HCU-14-3 Pretreatment Roof	0.77	0.8337
HCU-14-4 Pretreatment Roof	0.77	0.8337
HCU-14-5 Pretreatment Roof	0.77	0.8337
HCU-14-6 Pretreatment Roof	0.77	0.8337
HCU-11 Oven Roof	0.591	0.8
HCU-12 Cafeteria	0.692	0.8
MAU-14-1 Roof	1.5	1.62
MAU-14-2 Roof	1.5	1.62
MAU-14-3 Roof	1.5	1.62
MAU-14-4 Roof	1.5	1.62
MAU-14-5 Roof	1.5	1.62
AHU-14-1 Penthouse	3.834	4.167
AHU-14-2 Penthouse	3.834	4.167
Spray Booth Boilers	New	six at 1.25 each, total of 7.5
Natural gas-fired Emergency Generator	New	4.8

The BACT analysis was based on the draft “Top-Down Approach: BACT Guidance” published by USEPA, Office of Air Quality Planning Standards, March 15, 1990 and based on the following sources of information which were reviewed or contacted:

(1) RACT/BACT/LAER Information System; USEPA, BACT/LAER Clearinghouse;
(2) Compilation of Control Technology; USEPA, BACT/LAER Clearinghouse
(3) EPA, State, and Local Air Quality permits and applications where related;
(4) Control equipment and material vendors; and,
(5) OAQPS Control Cost Manual.

The five basic steps of a top-down BACT analysis are listed below:

Step 1: Identify Potential Control Technologies

For the source, emissions unit, activity, or process requiring BACT, identify and list all "available" emissions control options for emissions of VOC. Available control options are those VOC control technologies and techniques with a practical potential for application to the source, emissions

unit, activity, or process. In general, any control option in commercial use in the United States at the time the analysis is performed should be included on the list of available control options. As stated above, available VOC control technologies are limited to those that are associated with surface coating operations.

Step 2: Eliminate Technically Infeasible Options

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be clearly documented based on physical, chemical, engineering and source-specific factors related to safe and successful use of the controls.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation, except for the environmental analyses.

Step 4: Evaluate the Most Effective Controls and Document the Results

The fourth step entails an evaluation of energy, environmental and economic impacts for determining a final level of control. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.

Energy and Environmental Impacts of VOC Control Alternatives

There are no toxic impacts from the control options but there is an energy impact and emissions of GHG will result from the thermal oxidation control option as compared to no control.

Step 5: Select BACT

The fifth and final step is to select as BACT the most effective of the remaining technologies under consideration for each pollutant of concern. BACT must, at a minimum, be no less stringent than the level of control required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

BACT for Volatile Organic Compounds (VOC)

PROPOSED NEW PAINT LINE SYSTEM "C" - MISCELLANEOUS NATURAL GAS COMBUSTION PROCESS HEATERS, BOILERS, AND HVAC/AIR SUPPLY UNITS

The proposed miscellaneous natural gas combustion units that will support the Paint Line System C have the potential VOC total emissions of 4.07 tons/year.

Step 1 Identification of Control Technologies

VOC emissions from the combustion facilities primarily result as a by-product of incomplete and inefficient combustion of the fuel. These VOCs may comprise a wide spectrum of volatile and semi-volatile organic compounds. They are emitted to the atmosphere when some of the fuel remains unburned or partially burned during combustion. In the case of natural gas fuel, some of

the organics are carryover, unreacted, trace constituents of the gas while others may be pyrolysis products of heavier hydrocarbon constituents. From the previously identified sources of information, the technologies available to potentially control VOC emissions are the following:

(a) Good Combustion

(b) Oxidation Catalyst

(c) Thermal Incineration

(d) Condensation System

(e) Flares

(f) Membrane Separation Technology

Step 2 – Elimination of Infeasible Control Options

(a) **Good Combustion** - VOC emissions from combustion facilities primarily result from combustion by-products of the fuel. The RACT/BACT/LAER Clearinghouse database does not show any non-utility boiler, process heater or comfort heating unit smaller than 100 MMBtu/hr with an add-on control device to control VOC emissions. It identified "good combustion" as the only control technology that has been applied for the control of VOC emissions. This technology will be evaluated for further consideration in this BACT analysis.

(b) **Oxidation Catalysts** – Oxidation catalysts can be used to control VOC emissions from natural gas combustion devices. The catalyst promotes the oxidation of VOC to carbon dioxide and water as the emission stream passes through the catalyst bed. The catalyst is usually made of a precious metal such as platinum, palladium, or rhodium. Other formulations, such as metal oxides for emission streams containing chlorinated compounds, are also used. The oxidation process takes place spontaneously, without the requirement for introducing reactants. The performance of these oxidation catalyst systems depends on several variables including temperature, pressure drop, incoming VOC concentration and the presence in the flue gas of certain elements that may foul or deactivate (poison) the catalyst.

In a catalytic oxidizer, a catalyst is used to lower the activation energy for oxidation. When a preheated gas stream is passed through a catalytic oxidizer, the catalyst bed initiates and promotes the oxidation of VOCs without being permanently altered itself. In catalytic oxidization, combustion occurs at significantly lower temperatures than that of direct flame units and can also achieve a destruction efficiency of 95%. However, steps must be taken to ensure complete combustion. The types of catalysts used include platinum, platinum alloys, copper chromate, copper oxide, chromium, manganese and nickel. These catalysts are deposited in thin layers on an inert substrate, usually honeycomb-shaped ceramic.

The optimal working temperature range for VOC oxidation catalysts is approximately 850°F - 1,100°F with a minimum exhaust gas stream temperature of 500°F for minimally acceptable VOC control. The temperature of the natural gas combustion devices in this BACT analysis will be far below the minimum 500°F threshold for effective operation of an oxidation catalyst system.

Based upon a review of the previously listed information resources, there is no known application of oxidation catalysts to control VOC emissions from natural gas combustion devices with heat inputs less than 50 MMBtu/hr. VOC oxidation catalysts are usually installed on engines used to support the oil and gas industry. These engines have different exhaust characteristics and vary dramatically from the proposed natural gas combustion devices. The State of the Art (SOTA) Manual for Boilers and Process Heaters, written by the State of New Jersey's Department of Environmental Protection (NJDEP) – Air Quality Permitting Element, has also concluded that BACT for small boilers and process heaters greater than or equal 10 MMBtu/hr and less than 50 MMBtu/hr is good combustion practices and combustion controls. Boilers and process heaters in this size category are not required to install post-combustion controls to minimize emissions of VOC. As such, the NJDEP has concluded that the State of the Art controls for VOC emissions from natural gas combustion is good combustion practices.

Consequently, this control alternative is considered technically infeasible for this application to control VOC emissions from small natural gas combustion devices and will not be considered further in this BACT analysis.

(c) **Thermal Incineration** - Thermal incinerators are control devices in which the solvent laden air is preheated and the organic HAPs are ignited and combusted to carbon dioxide and water. Dilute gas streams require auxiliary fuel (generally natural gas) to sustain combustion. Various incinerator designs are used by different manufacturers. The combustion chamber designs must provide high turbulence to mix the fuel and solvent laden air. The other requirements are a high enough temperature and a long enough residence time to insure essentially complete combustion. Thermal incinerators can be operated to achieve a wide range of control device efficiencies. Efficiencies of 95% to greater than 99% are possible.

Based upon a review of the previously listed information resources including the RBLC database, there is no known application of thermal incineration for small natural gas combustion. In conclusion, the technology is not considered feasible to reduce VOC emissions from the updated natural gas combustion equipment, and will be precluded from further consideration in this BACT Analysis.

(d) **Condensation System** – These systems utilize a refrigerant to cool the exhaust stream, effect a phase change from gas to liquid for a target volatile constituent with ascertainable phase-change conditions, collect the liquid and thereby, lower the concentration in the gas-phase. However, the technology is only effective under high concentration gradients in excess of 100 ppmv which offers the motive force for the phase change. The exhaust streams associated with the proposed small natural gas combustion devices are very dilute with a multitude of volatile constituents which would preclude any effective technical applicability of a condensation system. In conclusion, condensation technology is not considered technically feasible to reduce VOC emissions

from natural gas combustion equipment, and will be precluded from further consideration in this BACT analysis.

(e) **Flares** - A VOC combustion control process in which the VOCs are piped to a remote, usually elevated, location and burned in an open flame in the open air using a specially designed burner tip, auxiliary fuel, and steam or air to promote mixing for destruction. Completeness of combustion in a flare is governed by flame temperature, residence time in the combustion zone, turbulent mixing of the gas stream components to complete the oxidation reaction, and available oxygen for free radical formation. Combustion is complete if all VOC emissions are converted to carbon dioxide and water. Incomplete combustion results in some of the VOCs being unaltered or converted to other organic compounds such as aldehydes or acids. This technology has been determined to be inappropriate for small natural gas combustion devices (in the range of less than 1.0 MMBtu/hr to approximately 50 MMBtu/hr) because of the low VOC concentration levels. Consequently, this control alternative is not considered technically feasible to reduce VOC emissions from the natural gas combustion equipment, and will be precluded from further consideration in this BACT analysis.

(f) **Membrane Separation Technology** – This organic vapor/air separation technology involves the preferential transport of organic vapors through a non-porous gas separation membrane via a diffusion process analogous to pumping saline water through a reverse osmosis membrane. In this system, the feedstream is compressed to approximately 150 psig and sent to a condenser where the liquid solvent is recovered. The condenser bleed stream is sent to the membrane module comprised of spirally-wound modules of thin film membranes separated by plastic mesh spacers. The concentrated stream from the membrane module is returned to the compressor for further recovery in the condenser. This technology has been proposed for offgas treatment from Soil Vapor Extraction (SVE) and other groundwater remediation systems. Based upon a review of the previously listed information resources including the RBLC database, there is no known application of membrane separation technology for small natural gas combustion equipment.

In conclusion, on account of the above operational limitations, the technology is not considered technically feasible to reduce VOC emissions from natural gas.

Step 3 – Rank Remaining Control Technologies

As shown in Steps 1 and 2, the only remaining viable control technologies for VOC emissions from small natural gas fired combustion equipment (in the range of less than 1.0 MMBtu/hr to approximately 50 MMBtu/hr) are combustion of natural gas and good combustion practices. These types of technologies are effective at reducing VOC emissions from small natural gas fired combustion equipment. Review of the RBLC database did not identify any small natural gas combustion devices with add-on controls as BACT. Review of the RBLC database indicates the BACT is good combustion control and VOC emission limits for small natural gas fired equipment.

Step 4 – Evaluate Most Effective Control

As shown in the previous steps, all add-on control options have been eliminated due to technical infeasibility to SIA's natural gas-fired combustion equipment, except for good combustion practices.

Step 5 – Select BACT

A review of USEPA's RACT/BACT/LAER Clearinghouse, including Indiana air permits and sources permitted by other states agencies, identified the following BACTs with respect to natural gas fired combustion equipment with sizes 1 MMBtu/hr to approximately 50 MMBtu/hr.

Facility/ RBLC ID	State	Permit Date	Basis	Heat Input (MMBtu/hr)	VOC BACT Limit	Controls
Existing: Subaru of Indiana Automotive, Inc	IN	12/23/2014	BACT PSD	Natural gas fired combustion equipment: 1-20 MMBtu/hr	0.005 lb/MMBtu	Combustion of natural gas
Proposed: Subaru of Indiana Automotive, Inc.	IN	Proposed	BACT PSD	Natural gas fired combustion equipment: 1-20 MMBtu/hr	0.005 lb/MMBtu	Combustion of natural gas. Good combustion practices, which includes proper care and maintenance of the natural gas burner system.
Klauser Holding USA, Inc.- FL 0335	FL	09/05/2012	BACT PSD	3 boilers each 46 MMBtu/hr	0.003 lb/MMBtu	Combustion of natural gas. Good combustion practices,
MGM Mirage NV-0050	NV	11/30/2009	Case-by-case	Natural gas fired water heater: 2 MMBtu/hr	0.0054 lb/MMBtu	Combustion of natural gas only and good combustion practices
Competitive Power Ventures, Inc MD-0040	MD	11/12/2009	LAER	Natural gas fired heater: 1.7 MMBtu/hr	0.005 lb/MMBtu	No controls feasible
Progress Energy Florida (PEF) FL-0285	FL	1/26/2007	BACT PSD	Natural gas fueled process heaters: 3.0 MMBtu/hr	2 gr S/100 scf gas	Combustion of natural gas
Competitive Power Ventures, Inc/CPV Maryland, LLC MD-0040	MD	11/12/2008	LAER for VOC	Natural gas Heater: 1.70 MMBtu/hr	0.0050 lb/MMBtu	Exclusive combustion of natural gas with sulfur content < 2.0 gr/100 SCF No add-on controls
Dominion Cove Point, LNG, L.P.	MD	8/12/2005	BACT PSD	Natural gas fired emergency vent	0.0054 lb/MMBtu	Combustion of natural gas only

Facility/ RBLC ID	State	Permit Date	Basis	Heat Input (MMBtu/hr)	VOC BACT Limit	Controls
MD-0035				heater: 1.3 MMBtu/hr		and good combustion practices
Wisconsin Public Service –Weston Plant WI-0228	WI	10/19/2004	BACT PSD	Natural gas fired heater: 0.75 MMBtu/hr	0.0040 lb/hr	Combustion of natural gas
Duke Energy Vermillion, LLC	IN	3/13/2003	BACT PSD	Natural gas fired boiler: 46 MMBtu/hr	0.0054 lb/MMBtu	Combustion of natural gas
Tenaska, IN	IN	11/12/2002	BACT PSD	Natural gas fired boiler: 40 MMBtu/hr	0.0054 lb/MMBtu	Combustion of natural gas
Interstate Power	IA	12/20/2002	BACT PSD	Natural gas fired boiler: 68 MMBtu/hr	0.0054 lb/MMBtu	Combustion of natural gas
Mustang Power	Ok	02/12/2002	BACT PSD	Natural gas fired boiler: 31 MMBtu/hr	0.0055 lb/MMBtu	Combustion of natural gas

Klauser Holding USA -

The PSD BACT determined for each of the three 46 MMBtu/hr boilers at this source is the most stringent limit at 0.003 lb/MMBtu, using only pipeline quality natural gas for fuel and use of good combustion practices. Based on the information from the permitting agency in Florida, this source is still being built.

All the other sources in the table have VOC BACT limits from 0.005 lb/MMBtu to 0.0055 lb/MMBtu/hr, using also natural gas for fuel and good combustion practices. These limits reflect the AP-42 emission factors established throughout the years.

Although the VOC BACT limit of 0.003 lb/MMBtu from Klauser Holding USA is the most stringent, the boilers at this source do not have any VOC add-on control similar to all the other comparative sources including Subaru's. All sources including Subaru's only combust pipeline quality natural gas for fuel and use good combustion practices.

The lower VOC of 0.003 lb/MMBtu of the natural gas in Florida where Klauser Holding USA is located is due to the fact that natural gas varies slightly from location to location. The suppliers of the natural gas process natural gas for consumer use which involves removing various impurities. Natural gas is typically 85% to 95% methane and also includes around 2% ethane. Both of these constituents are organic; however, EPA has excluded them from the definition of a volatile organic compound since they have negligible photochemical reactivity. Because of this variation, the amount of the methane and ethane can not be controlled; however, the suppliers can remove the impurities. Natural gas is processed so that it is able to be provided to the consumer as a combustible gas. In all cases, the natural gas has been processed so it can be referred to as a “Clean natural gas” or also referred to as “Pipeline quality natural gas”.

BACT Conclusion:

Based on the outcome of Steps 1 through 5, there is no alternative fuel that can be substituted for natural gas or air pollution control device or technique that is feasible to further reduce VOC during the combustion of natural gas for the following new natural gas combustion equipment associated with the proposed 2014 project:

Combustion Emission Unit/ID	Heat Input as Permitted in the original PSD/SSM 157-33759-00050 or PSD/SSM 157-34774-00050 (MMBtu/hr)	Heat Input Based on Final Engineering Design (MMBtu/hr)
PVC Sealer Oven	3.0	3.5
Intermediate (Surfacer) Oven	10.0	10.1
Intermediate (Surfacer) Air House	21.6	26.5
Topcoat Air House	38.0	42.0
Working Stage Air House #1 - Prep Deck, Off Line Areas	9.5	11.0
Working Stage Air House #2- Inspection, Touch-Up Area	6.5	11.0
HCU-14-1 Pretreatment Roof	0.77	0.8337
HCU-14-2 Pretreatment Roof	0.77	0.8337
HCU-14-3 Pretreatment Roof	0.77	0.8337
HCU-14-4 Pretreatment Roof	0.77	0.8337
HCU-14-5 Pretreatment Roof	0.77	0.8337
HCU-14-6 Pretreatment Roof	0.77	0.8337
HCU-11 Oven Roof	0.591	0.8
HCU-12 Cafeteria	0.692	0.8
MAU-14-1 Roof	1.5	1.62
MAU-14-2 Roof	1.5	1.62
MAU-14-3 Roof	1.5	1.62
MAU-14-4 Roof	1.5	1.62
MAU-14-5 Roof	1.5	1.62
AHU-14-1 Penthouse	3.834	4.167
AHU-14-2 Penthouse	3.834	4.167
Spray Booth Boilers	New	six at 1.25 each, total of 7.5

Therefore, the PSD BACT for VOC for the above combustion emission units listed on the right-hand column is the following:

(a) The VOC emissions shall be limited to 0.005 lb/MMBtu;

(b) The combustion of only natural gas fuel; and

(c) Use of good combustion practices, which includes proper care and maintenance of the natural gas burner systems.

VOC BACT FOR NATURAL GAS-FIRED EMERGENCY GENERATOR

Step 1: Identify Potential Control Technologies

There are no control options identified in the RBLC to control VOC that is emitted at similar sized natural gas-fired emergency generator.

Step 2: Eliminate Technically Infeasible Options

The emergency generator will be used primarily for emergency situations, if any. However, to maintain the integrity of the equipment, the generator will be operated for 100 hours per year or less. Based on the review of similar size emission units, these units typically do not have any add-on controls and are operated per manufacturer's specifications.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

The most effective method for controlling VOC emissions from operation of the emergency generator is the use of clean burning fuels, implementation of good combustion practices and use of combustion controls inherent to the design of the combustion unit.

Step 4: Evaluate the Most Effective Controls and Document the Results

There are no other feasible technologies to control emissions from the emergency generators. Therefore, economic, energy, and environmental impact analyses were not performed, nor are required, by USEPA's Top-Down approach.

Step 5 – Select BACT

The following table lists existing VOC BACT determinations for natural gas-fired emergency generators. All data in the table is based on the information obtained from the RBLC.

Facility/RBLC ID	Permit Date	Basis	Process	VOC BACT Limits	Controls
Subaru of Indiana	Proposed	BACT-PSD	4.8 MMBtu/hr (636 HP) (400 kW)	0.002 lb/HP-hr (1.4 lbs/hr)	Good Combustion Practices
Alcoa, Inc. Davenport Works IA-0102	02/01/2012	BACT-PSD	225 kW Emergency Generator	0.660 lb/hr	Good Combustion Practices
Allegheny Ludlum Corporation-Brackenridge Facility PA-0274	02/16/2010	BACT-PSD	2250 kW Emergency Generator	1.3 g/kW-hr (6.4 lbs/hr)	Only use pipeline quality natural gas
Allegheny Ludlum Corporation-Brackenridge Facility PA-0274	02/16/2010	BACT-PSD	1000 kW Emergency Generator	6.43 g/kW-hr (14.2 lbs/hr) includes NOx	Only use pipeline quality natural gas
Gulf Crossing Pipeline Co., LLC LA-0232	06/24/2008	BACT-PSD	Natural gas fired emergency generator	1.3 lb/hr	Good Combustion Practices, use of clean burning fuels such as natural gas.

As shown in the table above, BACT for the natural gas-fired emergency generator is consistently good combustion and operating practices. Based on the power rating of each engine, the VOC BACT limit ranges from 0.660 lb/hr to 14.2 lbs/hr. The higher the power rating of the engine, the higher the VOC limit in pounds/hour.

BACT Conclusion:

The source proposes that BACT for the new emergency generator be consistent with the limit in 40 CFR Part 60, Subpart JJJJ at 1 g/HP-hr (0.0022 lb/HP-hr (1.4 lbs/hr)), which is likewise, consistent with the previously determined BACT for generators.

Therefore, the BACT for the 4.8 MMBtu/hr (636 HP) emergency generator shall be the following:

(a) The VOC emissions from the 4.8 MMBtu/hr (rated at 636 HP) emergency generator shall be limited to 1 g/HP-hr (0.0022 lb/HP-hr (1.4 lbs/hr)).

(b) The emergency generator shall only combusts natural gas for fuel; and

(c) Use of good combustion practices, which includes proper care and maintenance of the natural gas burner systems.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Michael R. Pence
Governor

Carol S. Comer
Commissioner

January 15, 2016

Ms. Michelle Long
Subaru of Indiana Automotive, Inc.
P. O. Box 5689
Lafayette, Indiana 47903

Re: Public Notice
Subaru of Indiana Automotive, Inc.
Permit Level: Significant Source Modification
Permit Number: 157-36379-00050
Permit Level: Title V – Permit Renewal
Permit Number: 157-36402-00050

Dear Ms. Long:

Enclosed is a copy of your draft PSD/Significant Source Modification and Title V- Permit Renewal, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Journal & Courier in Lafayette, Indiana publish the abbreviated version of the public notice no later than January 15, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Tippecanoe Public Library, 627 South Street in Lafayette, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Aida De Guzman, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-4972 or dial (317) 233-4972.

Sincerely,

Vicki Biddle

Vicki Biddle
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 8/27/2015

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ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

January 14, 2016

Journal and Courier
217 N. 6th Street
Vevay, Indiana 47043

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Subaru of Indiana, Tippecanoe County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than January 15, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vicki Biddle at 800-451-6027 and ask for extension 3-6867 or dial 317-233-6867.

Sincerely,

Vicki Biddle

Vicki Biddle
Permit Branch
Office of Air Quality

Permit Level: Title V – Renewal & Title V – Significant Source Modification
Permit Number: 157-36402-00050 & 157-36379-00050

Enclosure

PN Newspaper.dot 8/27/2015

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

January 15, 2016

To: Tippecanoe County Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Subaru of Indiana Automotive, Inc.
Permit Number: 157-36379-00050 and 157-36402-00050

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 8/27/2015

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Notice of Public Comment

January 15, 2015
Subaru of Indiana Automotive, Inc.
157-36379-00050 and 157-36402-00050

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 8/27/2015

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Commissioner

AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

January 15, 2016

A 30-day public comment period has been initiated for:

Permit Number: **157-36379-00050 & 157-36402-00050**
Applicant Name: **Subaru of Indiana Automotive, Inc.**
Location: **Lafayette, Tippecanoe County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management
Office of Air Quality, Permits Branch
100 North Senate Avenue
Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Affected States Notification.dot 8/27/2015

Mail Code 61-53

IDEM Staff	VBIDDLE 1/15/2016 157-36379-00050 Subaru of Indiana Automotive, Inc. (SIA) 157-36402 -00050 DRAFT			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Michelle Long Subaru of Indiana Automotive, Inc. (SIA) PO Box 5689 Lafayette IN 47903 (Source CAATS)									
2		Thomas V Easterday Executive VP, Secretary, Chief Legal Officer Subaru of Indiana Automotive, Inc. (SIA) 5500 State Road 38 E Lafayette IN 47903 *(RO CAATS)*									
3		Tippecanoe County Commissioners 20 N 3rd St, County Office Building Lafayette IN 47901 *(Local Official)*									
4		Tippecanoe County Health Department 20 N. 3rd St Lafayette IN 47901-1211 *(Health Department)*									
5		Lafayette City Council and Mayors Office 20 North 6th Street Lafayette IN 47901-1411 *(Local Official)*									
6		Tippecanoe County Public Library 627 South Street Lafayette IN 47901-1470 *(Library)*									
7		Ms. Geneva Werner 3212 Longlois Drive Lafayette IN 47904-1718 *(Affected Party)*									
8		Mrs. Phyllis Owens 3600 Cypress Lane Lafayette IN 47905 *(Affected Party)*									
9		Mr. Jerry White 4317 Amesbury Drive West Lafayette IN 47906 *(Affected Party)*									
10		Ms. Rose Filley 5839 Lookout Drive West Lafayette IN 47906 *(Affected Party)*									
11		Mr. William Cramer 128 Seminole Drive West Lafayette IN 47906 *(Affected Party)*									
12		West Lafayette City Council and Mayors Office 609 W. Navajo West Lafayette IN 47906 *(Local Official)*									
13		Mr. Steven Frey Kennedy/Jenks Consultants 1515 Woodfield Rd, Ste 360 Schaumburg IL 60173 (Consultant)									
14		Mr. Allen Hoffman 4740 Masons Ridge Rd. Lafayette IN 47909 *(Affected Party)*									
15											

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