INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: October 4, 2012

RE: Subaru of Indiana / 157-31885-00050

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot12/03/07

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Ms. Denise Coogan
Subaru of Indiana Automotive, Inc.
P. O. Box 5689
Lafayette, Indiana 47903

October 4, 2012

Re: 157-31885-00050
PSD/Significant Source Modification to
Part 70 Source (TVOP 157-27048-00050)

Dear Ms. Coogan:

Subaru of Indiana Automotive, Inc. (SIA) was issued Part 70 Operating Permit 157-27048-00050 on August 1, 2011 for an automotive and light-duty truck assembly plant. An application to modify the Part 70 source was received on May 16, 2012. Pursuant to 326 IAC 2-7-10.5, and 326 IAC 2-2, a PSD/Significant Source Modification is hereby approved for SIA to make the following changes at the existing source that will allow (i) the production of new vehicle styles and (ii) 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.

The following changes will allow higher vehicle production on an hourly basis to allow the plant to achieve its permitted annual production rate of 310,000 vehicles, which is unchanged, with less weekday overtime and/or weekend operations:

(a) Electrodeposition (ED) Paint System (Unit 001) - Increase vehicle holding/storage area. This change will not result in an increase in annual Potential to Emit (PTE). The change will fill in line gaps in subsequent operations that will allow an increase in more vehicles coated per hour, thus minimizing weekday overtime and weekend operations.

(b) Sealer Deck (Unit 002 – Sealing and PVC Undercoating Line) - Physical change includes extending the conveyor system and installing four (4) additional spray coating application systems. The change will not result in an increase in annual PTE.

(c) PVC Coating Line (Unit 002 – Sealing and PVC Undercoating Line) - Physical change includes the installation of two (2) additional spray coating application systems. The intent of the change is to accommodate a higher line speed which will allow more vehicles to be coated on an hourly basis, thus minimizing weekday overtime and weekend operations.

(d) Intermediate (Surfacer) Coating Line (Unit 004) - The physical change includes alterations to the conveyor system to add storage capacity to fill in gaps in subsequent operations. The intent of the change is to accommodate a higher line speed which will allow more vehicles to be coated on an hourly basis, thus minimizing weekday overtime and weekend operations.

(e) Blackout and Wax Booth (Unit 006 – Anticorrosion Coating) - Physical change includes the installation of two (2) additional spray coating systems. The change will fill in line gaps in subsequent operations that will allow an increase in more vehicles coated hourly, thus minimizing weekday overtime and weekend operations.

(f) Trim Line (Unit 010) - Physical change includes increasing the line speed to allow more vehicles to be coated on an hourly basis, thus minimizing weekday overtime and/or weekend operations.

The following changes to SIA's plant are intended to: (i) support a new model to be produced at the plant; and (ii) otherwise generally support SIA's operations. These changes are not related to the goal of reducing weekday overtime and/or weekend operations.

(a) Body Shop - Expansion of body shop building to include a parts storage area and body shop processing area, including the following new emission units:

(1) 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

(2) MIG welding operations, with a maximum welding rod usage of 33,000 pounds per year.

For PSD aggregation purposes, these proposed changes are considered to be a supplement to and continuation of the modification permitted in PSD/SSM No. 157-29566-00050, issued on December 22, 2010, since the primary purpose of the proposed changes is to allow SIA to achieve the production levels allowed under this 2010 PSD project.

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Revocation of Permits [326 IAC 2-2-8]
Pursuant to 326 IAC 2-2-8(a)(1), this permit to construct shall expire if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is discontinued for a period of eighteen (18) months or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l), the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

This PSD/significant source modification authorizes construction of the permitted changes. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Matthew Stuckey, Chief
Permits Branch
Office of Air Quality

Attachments
APD

cc: EPA Region V
Tippecanoe County
Tippecanoe County Health Department
Compliance and Enforcement Branch
Permit Administration Support Section

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PSD/SIGNIFICANT SOURCE MODIFICATION TO A PART 70 SOURCE 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 construct subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this Permit.

This approval 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.
This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

PSD/Significant Source Modification No. 157-31885-00050	
Issued by: Matthew Stuckey, Chief Permits Branch Office of Air Quality	Issuance Date: October 4, 2012

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40 CR Part 63, Subpart IIII (Attachment D)

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, IN 47905
General Source Phone Number:	765 449-1111
SIC Code:	3711
County Location:	Tippecanoe
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 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:

(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, with three (3) insignificant natural gas direct fired burners, using a 3.0 MMBtu/hr natural gas-fired catalytic incinerator (TC-1) 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 use no controls and exhaust to one (1) stack, identified as TC-1 Ex.);

(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, with three (3) insignificant natural gas direct fired burners, using a 1.5 MMBtu/hr natural gas-fired catalytic incinerator (TC-2) 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 use no controls and exhaust to one (1) stack, identified as TC-2 Ex.).

(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, with three (3) insignificant natural gas-fired burners, using a 2.5 MMBtu/hr natural gas-fired catalytic incinerator (TUT) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2;

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

(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) 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) 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.

(g) One (1) plastic fascia paint line system (PFPLS#2), which will coat 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 booth, 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);

(2) One (1) basecoat spray zone, 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).

(3) One (1) clearcoat spray zone, 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);

(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); and

(7) One (1) paint mix room.

(h) Final Repair (Touchup) painting, identified as Unit 007, with a capacity of 10 units per hour, constructed in 1989, 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;

(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.

(j) Six (6) storage tanks, identified collectively as Unit 011, and including 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.

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):

(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: [40 CFR 52.21] [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; 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 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 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) [40 CFR 52.21] [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.

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

This stationary 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, T157-27048-00050, 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 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.6 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.7 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.8 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.9 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:

(i) it contains a certification by a "responsible official"as defined by 326 IAC 2-7-1(34), and

(ii) the certification is 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(34).

B.10 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 V
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(34).

B.11 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.

(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(34).

(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(34).

(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.12 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, not later than 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)
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

not later than 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(34).

(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.13 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, as well as the federal statutes from the Clean Air Act and federal regulations from 40 CFR, where 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.14 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 PSD/SSM No. 157-29566-00050 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.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(34).

(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(40). 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(34).

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(34).

(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 V
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),(c), or (e). 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(36)) 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 the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(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(34).

(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 not later than 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).

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.

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 by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 by a "responsible official" as defined by 326 IAC 2 -7 -1(34).

(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 by a "responsible official" as defined by 326 IAC 2 -7 -1(34).

(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) 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 or of initial start -up, whichever is later, 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 or the date of initial startup, whichever is later, 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(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

(b) 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.

(c) 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.

(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]

(a) Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(1) 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.

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

(i) initial inspection and evaluation;

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

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

(3) 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:

(i) monitoring results;

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

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

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

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

(b)

(1) CAM Response to excursions or exceedances.

(i) 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.

(ii) 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.

(2) 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.

(3) 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 QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(4) 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).

(5) 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.

(6) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) 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:
(i) Failed to address the cause of the control device performance problems; or
(ii) 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.

(7) 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.

(8) CAM recordkeeping requirements.
(i) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) 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.

(ii) 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(34).

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(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
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(34).

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:

(1) All calibration and maintenance records.
(2) All original strip chart recordings for continuous monitoring instrumentation.
(3) Copies of all reports required by the Part 70 permit.
Records of required monitoring information include the following:
(4) The date, place, as defined in this permit, and time of sampling or measurements.
(5) The dates analyses were performed.
(6) The company or entity that performed the analyses.

(7) The analytical techniques or methods used.
(8) The results of such analyses.
(9) 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 [40 CFR 64][326 IAC 3-8] [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

(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(34). 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 FACILITY 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, the Permittee must adhere to the following conditions:

(a) The source shall not produce greater than 310,000 vehicles per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The particulate (PM/PM10) emissions from PVC #1 Coating Booth, PVC #2 Coating Booth, Topcoat #1 Coating Booth, Topcoat #2 Coating Booth, Topcoat Booth #3, Intermediate (Surfacer) Coating Booth, Plastic Bumper Coating Booth, Black Coat and Wax Coating Booth, Anticorrosion Coating Booth, Touchup Trim Coating Booth, Touchup IPC Coating Booth, source-wide natural gas combustion, and all insignificant facilities that were permitted by the PSD (79) 1651 Revision 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 shall not exceed 2,380 million standard cubic feet per 12 consecutive month period with compliance determined at the end of each month.

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

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

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

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 PM/PM10 + PVC #2 Coating PM/PM10 + Topcoat #1 Coating PM/PM10 + Topcoat #2 Coating PM/PM10 + Topcoat #3 Coating PM/PM10 + Intermediate (Surfacer) Coating PM/PM10 + Plastic Bumper Coating PM/PM10 + Black Coat and Wax Coating PM/PM10 + Anticorrosion Coating 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 (34).

(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 (34).

(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 (34).

(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 (34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

(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 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 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. 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.

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.

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

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.4.1(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)]

(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)]

(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 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 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 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 Coating 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 (34). 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

Facility Description [326 IAC 2-7-5(14)]:

(g) One (1) plastic fascia paint line system (PFPLS#2), for a new vehicle type which will coat 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 PFPLS booth, 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);

(2) One (1) basecoat spray zone, 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);

(3) One (1) clearcoat spray zone, 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);

(4) Two (2) paint flash off areas for the primer zone and basecoat zone, exhausting to stack PB2(d), which includes natural gas indirect 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 indirect 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); and

(7) One (1) 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.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 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.

(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 5 MMBtu/hr natural gas-fired dry off oven added to 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.

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 following the plastic fascia paint line shall be as follows:

(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 VOC emissions, after control, from the primer coating process, shall not exceed 0.90 pound per gallon of coating (lbs/gal).

(2) The VOC emissions, after control, from the basecoat coating process, shall not exceed 1.15 lbs/gal of coating.

(3) The VOC emissions, after control, from the clearcoat coating process, shall not exceed 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.

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.

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 not exceed 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).

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

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.

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 =

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

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 apply after controls to emissions from the fascia paint line shall be determined by using the following equation:

VOC Emissions Rate $= V_c/C_y$

Where:
V_c is the controlled VOC emissions of the booths in pound per year; and
C_y is the booths coating usage in gallon per year.

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.

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):

(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)]

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.

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]

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) and the VOC content of each solvent (including purge solvents and thinners).

(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 5 MMBtu/hr heat flash 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.

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 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 (34).

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

(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, 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;

(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, with three (3) insignificant natural gas direct fired burners, using a 3.0 MMBtu/hr natural gas-fired catalytic incinerator (TC-1) 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 use no controls and exhaust to one (1) stack, identified as TC-1 Ex.);

SECTION D.4 FACILITY 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, with three (3) insignificant natural gas direct fired burners, using a 1.5 MMBtu/hr natural gas-fired catalytic incinerator (TC-2) 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 use no controls and exhaust to one (1) stack, identified as TC-2 Ex.);

(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, with three (3) insignificant natural gas-fired burners, using a 2.5 MMBtu/hr natural gas-fired catalytic incinerator (TUT) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2;

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

(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) 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) Main paint mix room.

SECTION D.4 FACILITY 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) 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.

(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 not exceed 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 Booth #3	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 incinerators used to control VOC emissions from the Topcoat #1 Oven, Topcoat #2 Oven and Intermediate Coating Oven shall each achieve a minimum VOC destruction efficiency of 90%.

The VOC emissions from the Topcoat #3 Booth’s Curing Oven shall be vented to the existing Catalytic Incinerator with a 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 Booth #3:

(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 emission from the one (1) 2.5 MMBtu/hr Topcoat #3 flash zone heater shall not exceed 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 not exceed 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 three (3) insignificant Topcoat #1 Oven burners;

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

(N) the three (3) insignificant Topcoat #2 Oven burners;

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

(P) the three (3) insignificant Topcoat #3 Booth Oven burners; and

(Q) the insignificant Wet Sand Repair Dryoff Oven burner.

(2) Shall not exceed 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;

(D) the insignificant Topcoat #1 Oven incinerator;

(E) the insignificant Topcoat #2 Oven incinerator; and

(F) the insignificant Topcoat #3 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.5.2, 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 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).

(b) 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, 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 (TC-1, TC-2, TUT, 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

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):

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

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:

$$\text{VOC emissions (lb VOC/gal coating less water)} = \left[\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} U\right] (\times [1 - (CE \times DE)]$$

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 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]

The Permittee shall perform VOC testing to verify VOC destruction efficiencies of the catalytic incinerator, TC-1 controlling Topcoat #1 Oven; the catalytic incinerator TC-2, controlling Topcoat Booth #2 Oven; the catalytic incinerator, TUT controlling the Topcoat Booth #3 Oven; 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.

(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.4.13 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 each catalytic incinerator whenever any of the ED Body Oven, Topcoat #1 Oven, Topcoat #2 Oven, Topcoat #3 Oven, and Intermediate Coating Oven is in operation to control the VOC emissions from the ED Body Oven, Topcoat #1 Oven, Topcoat #2 Oven, Topcoat #3 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) The Permittee shall determine the three (3) hour average temperature at the inlet to the catalyst bed of each catalytic incinerator 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, TC-1, TC-2, TUT, and SUR) 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 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 TC1-10; 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 TUT1 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; Topcoat #2 Booth stacks, identified as TC2-1 through TC2-10 and Topcoat #3 Booth stacks, identified as TUT1 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 within 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 catalysts bed of each incinerator and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

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

(3) The continuous inlet temperature to the catalyst bed of each catalytic incinerator.

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

(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 TC1-10; Topcoat #2 Booth stacks, identified as TC2-1 through TC2-10 and Topcoat #3 Booth stacks, identified as TUT1 through TUT-5.

(e) To document the compliance status with Condition D.4.1(g) and (h), 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 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 (34).

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

h) Final Repair (Touchup) painting, identified as Unit 007, with a capacity of 10 units per hour, constructed in 1989, 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

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:

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

Where:

C_i is the VOC content of the coating ($_i$) in pounds of VOC per gallon of coating 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 (34). 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 minus water

(2) 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.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

(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 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.

(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.6.7:

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.6.7:

Facility	lb VOC/gal coating solids (lb/gcs)	kg VOC/liter coating solids (kg/lcs)
Before Vehicle Assembly		
Black and Wax Booth (black phthalic resin application)	17.9	2.14
Black 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 efficiency of 80%
(in Black and Wax Booth)

(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 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

(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 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.

(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 6.7.

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 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

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):

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

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 Booth #1, PVC Booth #2, Black Coat and Wax 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 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. Magnahelic 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 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 (34).

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(14)]:

(k) 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.

(l) Six (6) storage tanks, identified collectively as Unit 011, and including 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 three 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 and PSD 157-31885-00050, 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 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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.

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

D.7.4 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) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.7.5 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 (34).

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [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):

(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 (44)

(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; 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 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 FACILITY 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 (38 - 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.

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

SECTION E.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(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,

SECTION E.1 FACILITY OPERATION CONDITIONS

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, 2008, 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/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, with three (3) insignificant natural gas direct fired burners, using a 3.0 MMBtu/hr natural gas-fired catalytic incinerator (TC-1) 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 use no controls and exhaust to one (1) stack, identified as TC-1 Ex.);

(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, with three (3) insignificant natural gas direct fired burners, using a 1.5 MMBtu/hr natural gas-fired catalytic incinerator (TC-2) 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 use no controls and exhaust to one (1) stack, identified as TC-2 Ex.).

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

SECTION E.1 FACILITY OPERATION CONDITIONS

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, with three (3) insignificant natural gas-fired burners, using a 2.5 MMBtu/hr natural gas-fired catalytic incinerator (TUT) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2;

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

(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) 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) 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);

SECTION E.1 FACILITY OPERATION CONDITIONS

(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 and Wax Coat 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 (PFPLS#2), for a new vehicle type which will coat 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 booth, utilizing air atomized spray with robot method of application and automatic spray applicators, with water wash system to

SECTION E.1 FACILITY OPERATION CONDITIONS

control the particulate overspray emissions, and exhausting to one (1) stack , identified as PB2(a);

(2) One (1) basecoat spray zone, 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).

(3) One (1) clearcoat spray zone , 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);

(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); and

(7) One (1) paint mix room.

(h) 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.

(i) Six (6) storage tanks, identified collectively as Unit 011, and including 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.

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

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 – (Attachment 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
40 CFR Part 63.3081
40 CFR Part 63.3082
40 CFR Part 63.3083
40 CFR Part 63.3090
40 CFR Part 63.3091
40 CFR Part 63.3092
40 CFR Part 63.3093
40 CFR Part 63.3094
40 CFR Part 63.3100
40 CFR Part 63.3101
40 CFR Part 63.3110
40 CFR Part 63.3120
40 CFR Part 63.3130
40 CFR Part 63.3131
40 CFR Part 63.3150
40 CFR Part 63.3151
40 CFR Part 63.3152
40 CFR Part 63.3160
40 CFR Part 63.3161
40 CFR Part 63.3163
40 CFR Part 63.3164
40 CFR Part 63.3165
40 CFR Part 63.3167
40 CFR Part 63.3168
40 CFR Part 63.3170
40 CFR Part 63.3171
40 CFR Part 63.3173
40 CFR Part 63.3175
40 CFR Part 63.3176
Table 1 to Subpart IIII
Table 2 to Subpart IIII
Table 3 to Subpart IIII
Appendix A to Subpart IIII

SECTION E.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(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, 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, with three (3) insignificant natural gas direct fired burners, using a 3.0 MMBtu/hr natural gas-fired catalytic incinerator (TC-1) 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 use no controls and exhaust to one (1) stack, identified as TC-1 Ex.);

SECTION E.2 FACILITY 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, with three (3) insignificant natural gas direct fired burners, using a 1.5 MMBtu/hr natural gas-fired catalytic incinerator (TC-2) 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 use no controls and exhaust to one (1) stack, identified as TC-2 Ex.).

(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, with three (3) insignificant natural gas-fired burners, using a 2.5 MMBtu/hr natural gas-fired catalytic incinerator (TUT) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2;

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

(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) 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) Main paint mix room.

SECTION E.2 FACILITY 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) 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

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

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 provisions of 40 CFR Part 60, Subpart MM, as follows:

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

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.: T157-27048-00050

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:

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.: T157-27048-00050

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) 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 **Page 2 of 2**

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: ______________________________

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
Facility: Natural gas combustion units
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)
Month 1			
Month 2			
Month 3			

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.: T157-27048-00050
Facility: Source-wide
Parameter: # vehicles produced
Limit: Less than 310,000 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)
Month 1			
Month 2			
Month 3			

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.: T157-27048-00050
Facility: Source-wide surface coating operations, associated purge solvent operations and wiping/cleaning solvents, and storage
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)
Month 1			
Month 2			
Month 3			

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.:	T157-27048-00050
Facility:	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 Coating 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)
Month 1			
Month 2			
Month 3			

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.: T157-27048-00050
Facility: Natural gas combustion units associated with the Fascia Paint Line and the 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)
Month 1			
Month 2			
Month 3			

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.: T157-27048-00050
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 1			
Month 2			
Month 3			

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:________________________

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.:	T157-27048-00050
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)
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this month.
☐ Deviation/s occurred in this month.
Deviation has been reported on: _________________________

Submitted by: ____
Title / Position: ____
Signature: ____
Date: ____
Phone: ____

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 157-5906-00050
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: ______________________________

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 157-5906-00050
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: ________________________

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 157-5906-00050
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 1: _________ Volume Weighted Average VOC Usage (pounds of VOC/gallon as applied)	Month 2: _________ Volume Weighted Average VOC Usage (pounds of VOC/gallon as applied)	Month 3: _________ 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: ____

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 157-5906-00050
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: ________________________________

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 157-5906-00050
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: ________________________________

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.: T157-27048-00050

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: ________________________________

ATTACHMENT A

Title 40: Protection of Environment
PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart A—General Provisions
§ 60.1 Applicability.

(a) Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
(b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
(c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.
(d) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.* (1) This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site").
(2) Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either complying directly with the requirements of this part, or reducing the site-wide emissions caps in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the site-wide emissions caps in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this part.
(3) Notwithstanding the provisions of paragraph (d)(2) of this section, for any provisions of this part except for Subpart Kb, the owner/operator of the site shall comply with the applicable provisions of this part if the Administrator determines that compliance with the provisions of this part is necessary for achieving the objectives of the regulation and the Administrator notifies the site in accordance with the provisions of the permit issued pursuant to 40 CFR 52.2454.
[40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382, Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994; 62 FR 52641, Oct. 8, 1997]

§ 60.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:
Act means the Clean Air Act (42 U.S.C. 7401 *et seq.*)
Administrator means the Administrator of the Environmental Protection Agency or his authorized representative.
Affected facility means, with reference to a stationary source, any apparatus to which a standard is applicable.
Alternative method means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for his determination of compliance.
Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to Title V of the Act (42 U.S.C. 7661).
Capital expenditure means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.
Clean coal technology demonstration project means a project using funds appropriated under the heading

'Department of Energy-Clean Coal Technology', up to a total amount of $2,500,000,000 for commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.
Commenced means, with respect to the definition of *new source* in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.
Construction means fabrication, erection, or installation of an affected facility.
Continuous monitoring system means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.
Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
Equivalent method means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
Excess Emissions and Monitoring Systems Performance Report is a report that must be submitted periodically by a source in order to provide data on its compliance with stated emission limits and operating parameters, and on the performance of its monitoring systems.
Existing facility means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.
Force majeure means, for purposes of §60.8, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.
Isokinetic sampling means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.
Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a Title V permit occurs immediately after the EPA takes final action on the final permit.
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. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.
Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.
Monitoring device means the total equipment, required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.
Nitrogen oxides means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in this part.
One-hour period means any 60-minute period commencing on the hour.
Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
Owner or operator means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.
Part 70 permit means any permit issued, renewed, or revised pursuant to part 70 of this chapter.
Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured

by the reference methods specified under each applicable subpart, or an equivalent or alternative method.
Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.
Permitting authority means:
(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or
(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).
Proportional sampling means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.
Reactivation of a very clean coal-fired electric utility steam generating unit means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:
(1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;
(2) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;
(3) Is equipped with low-NO_Xburners prior to the time of commencement of operations following reactivation; and
(4) Is otherwise in compliance with the requirements of the Clean Air Act.
Reference method means any method of sampling and analyzing for an air pollutant as specified in the applicable subpart.
Repowering means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.
Run means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.
Shutdown means the cessation of operation of an affected facility for any purpose.
Six-minute period means any one of the 10 equal parts of a one-hour period.
Standard means a standard of performance proposed or promulgated under this part.
Standard conditions means a temperature of 293 K (68F) and a pressure of 101.3 kilopascals (29.92 in Hg).
Startup means the setting in operation of an affected facility for any purpose.
State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part; and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.
Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.
Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.
Volatile Organic Compound means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any subpart.
[44 FR 55173, Sept. 25, 1979, as amended at 45 FR 5617, Jan. 23, 1980; 45 FR 85415, Dec. 24, 1980; 54 FR 6662, Feb. 14, 1989; 55 FR 51382, Dec. 13, 1990; 57 FR 32338, July 21, 1992; 59 FR 12427, Mar. 16, 1994; 72 FR 27442, May 16, 2007]

§ 60.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:
(a) System International (SI) units of measure:
A—ampere
g—gram
Hz—hertz
J—joule
K—degree Kelvin
kg—kilogram
m—meter
m^3 —cubic meter
mg—milligram—10^{-3}gram
mm—millimeter—10^{-3}meter
Mg—megagram—10^6 gram
mol—mole
N—newton
ng—nanogram—10^{-9}gram
nm—nanometer—10^{-9}meter
Pa—pascal
s—second
V—volt
W—watt
Ω—ohm
µg—microgram—10^{-6}gram
(b) Other units of measure:
Btu—British thermal unit
°C—degree Celsius (centigrade)
cal—calorie
cfm—cubic feet per minute
cu ft—cubic feet
dcf—dry cubic feet
dcm—dry cubic meter
dscf—dry cubic feet at standard conditions
dscm—dry cubic meter at standard conditions
eq—equivalent
°F—degree Fahrenheit
ft—feet
gal—gallon
gr—grain
g-eq—gram equivalent
hr—hour
in—inch
k—1,000
l—liter
lpm—liter per minute
lb—pound
meq—milliequivalent
min—minute
ml—milliliter
mol. wt.—molecular weight
ppb—parts per billion
ppm—parts per million
psia—pounds per square inch absolute
psig—pounds per square inch gage

°R—degree Rankine
scf—cubic feet at standard conditions
scfh—cubic feet per hour at standard conditions
scm—cubic meter at standard conditions
sec—second
sq ft—square feet
std—at standard conditions
(c) Chemical nomenclature:
CdS—cadmium sulfide
CO—carbon monoxide
CO_2—carbon dioxide
HCl—hydrochloric acid
Hg—mercury
H_2O—water
H_2S—hydrogen sulfide
H_2SO_4—sulfuric acid
N_2—nitrogen
NO—nitric oxide
NO_2—nitrogen dioxide
NO_X—nitrogen oxides
O_2—oxygen
SO_2—sulfur dioxide
SO_3—sulfur trioxide
SO_X—sulfur oxides
(d) Miscellaneous:
A.S.T.M.—American Society for Testing and Materials
[42 FR 37000, July 19, 1977; 42 FR 38178, July 27, 1977]

§ 60.4 Address.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following list of EPA Regional Offices.
Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Office of Ecosystem Protection, U.S. Environmental Protection Agency, 5 Post Office Square—Suite 100, Boston, MA 02109–3912.
Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, Federal Office Building, 26 Federal Plaza (Foley Square), New York, NY 10278.
Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, Mail Code 3AP00, 1650 Arch Street, Philadelphia, PA 19103–2029.
Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, 61 Forsyth St. SW., Suite 9T43, Atlanta, Georgia 30303–8960.
Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, IL 60604–3590.
Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas); Director; Air, Pesticides, and Toxics Division; U.S. Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202.
Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air, RCRA, and Toxics Division, U.S. Environmental Protection Agency, 901 N. 5th Street, Kansas City, KS 66101.
Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Mail Code 8ENF–AT, 1595 Wynkoop Street, Denver, CO 80202–1129.
Region IX (Arizona, California, Hawaii and Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island,

Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau), Director, Air Division, U.S. Environmental Protection Agency, 75 Hawthorne Street, San Francisco, CA 94105.
Region X (Alaska, Oregon, Idaho, Washington), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, 1200 Sixth Avenue, Seattle, WA 98101.
(b) Section 111(c) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards of performance for new stationary sources located in such State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may except sources from a certain Federal or State reporting requirement). The appropriate mailing address for those States whose delegation request has been approved is as follows:
(A) [Reserved]
(B) State of Alabama: Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, Alabama 36130–1463.
(C) State of Alaska, Department of Environmental Conservation, Pouch O, Juneau, AK 99811.
(D) Arizona:
Arizona Department of Environmental Quality, 1110 West Washington Street, Phoenix, AZ 85007.
Maricopa County Air Quality Department, 1001 North Central Avenue, Suite 900, Phoenix, AZ 85004.
Pima County Department of Environmental Quality, 33 North Stone Avenue, Suite 700, Tucson, AZ 85701.
Pinal County Air Quality Control District, 31 North Pinal Street, Building F, Florence, AZ 85132.
Note: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.
(E) State of Arkansas: Chief, Division of Air Pollution Control, Arkansas Department of Pollution Control and Ecology, 8001 National Drive, P.O. Box 9583, Little Rock, AR 72209.
(F) California:
Amador County Air Pollution Control District, 12200–B Airport Road, Jackson, CA 95642.
Antelope Valley Air Quality Management District, 43301 Division Street, Suite 206, Lancaster, CA 93535.
Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, CA 94109.
Butte County Air Quality Management District, 2525 Dominic Drive, Suite J, Chico, CA 95928.
Calaveras County Air Pollution Control District, 891 Mountain Ranch Road, San Andreas, CA 95249.
Colusa County Air Pollution Control District, 100 Sunrise Blvd., Suite A–3, Colusa, CA 95932–3246.
El Dorado County Air Quality Management District, 2850 Fairlane Court, Bldg. C, Placerville, CA 95667–4100.
Eastern Kern Air Pollution Control District, 2700 “M” Street, Suite 302, Bakersfield, CA 93301–2370.
Feather River Air Quality Management District, 1007 Live Oak Blvd., Suite B–3, Yuba City, CA 95991.
Glenn County Air Pollution Control District, 720 N. Colusa Street, P.O. Box 351, Willows, CA 95988–0351.
Great Basin Unified Air Pollution Control District, 157 Short Street, Suite 6, Bishop, CA 93514–3537.
Imperial County Air Pollution Control District, 150 South Ninth Street, El Centro, CA 92243–2801.
Lake County Air Quality Management District, 885 Lakeport Blvd., Lakeport, CA 95453–5405.
Lassen County Air Pollution Control District, 707 Nevada Street, Suite 1, Susanville, CA 96130.
Mariposa County Air Pollution Control District, P.O. Box 5, Mariposa, CA 95338.
Mendocino County Air Quality Management District, 306 E. Gobbi Street, Ukiah, CA 95482–5511.
Modoc County Air Pollution Control District, 619 North Main Street, Alturas, CA 96101.
Mojave Desert Air Quality Management District, 14306 Park Avenue, Victorville, CA 92392–2310.
Monterey Bay Unified Air Pollution Control District, 24580 Silver Cloud Court, Monterey, CA 93940.
North Coast Unified Air Quality Management District, 2300 Myrtle Avenue, Eureka, CA 95501–3327.
Northern Sierra Air Quality Management District, 200 Litton Drive, Suite 320, P.O. Box 2509, Grass Valley, CA 95945–2509.
Northern Sonoma County Air Pollution Control District, 150 Matheson Street, Healdsburg, CA 95448–4908.
Placer County Air Pollution Control District, 3091 County Center Drive, Suite 240, Auburn, CA 95603.
Sacramento Metropolitan Air Quality Management District, 777 12th Street, Third Floor, Sacramento, CA 95814–1908.
San Diego County Air Pollution Control District, 10124 Old Grove Road, San Diego, CA 92131–1649.
San Joaquin Valley Air Pollution Control District, 1990 E. Gettysburg, Fresno, CA 93726.
San Luis Obispo County Air Pollution Control District, 3433 Roberto Court, San Luis Obispo, CA 93401–7126.
Santa Barbara County Air Pollution Control District, 260 North San Antonio Road, Suite A, Santa Barbara, CA

93110–1315.
Shasta County Air Quality Management District, 1855 Placer Street, Suite 101, Redding, CA 96001–1759.
Siskiyou County Air Pollution Control District, 525 So. Foothill Drive, Yreka, CA 96097–3036.
South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA 91765–4182.
Tehama County Air Pollution Control District, P.O. Box 8069 (1750 Walnut Street), Red Bluff, CA 96080–0038.
Tuolumne County Air Pollution Control District, 22365 Airport, Columbia, CA 95310.
Ventura County Air Pollution Control District, 669 County Square Drive, 2nd Floor, Ventura, CA 93003–5417.
Yolo-Solano Air Quality Management District, 1947 Galileo Court, Suite 103, Davis, CA 95616–4882.
Note: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.
(G) State of Colorado, Department of Public Health and Environment, 4300 Cherry Creek Drive South, Denver, CO 80222–1530.
Note: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.
(H) State of Connecticut, Bureau of Air Management, Department of Environmental Protection, State Office Building, 165 Capitol Avenue, Hartford, CT 06106.
(I) State of Delaware, Department of Natural Resources & Environmental Control, 89 Kings Highway, P.O. Box 1401, Dover, Delaware 19903.
(J) District of Columbia, Department of Public Health, Air Quality Division, 51 N Street, NE., Washington, DC 20002.
(K) State of Florida: Florida Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, MS 5500, Tallahassee, Florida 32399–2400.
(L) State of Georgia: Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, 4244 International Parkway, Suite 120, Atlanta, Georgia 30354.
(M) Hawaii:
Clean Air Branch, Hawaii Department of Health, 919 Ala Moana Blvd., Suite 203, Honolulu, HI 96814.
Note: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.
(N) State of Idaho, Department of Health and Welfare, Statehouse, Boise, ID 83701.
(O) State of Illinois: Illinois Environmental Protection Agency, 1021 North Grand Avenue East, Springfield, Illinois 62794.
(P) State of Indiana: Indiana Department of Environmental Management, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana 46204.
(Q) State of Iowa: Iowa Department of Natural Resources, Environmental Protection Division, Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, IA 50322.
(R) State of Kansas: Kansas Department of Health and Environment, Bureau of Air and Radiation, 1000 S.W. Jackson, Suite 310, Topeka, KS 66612–1366.
(S) Commonwealth of Kentucky: Commonwealth of Kentucky, Energy and Environment Cabinet, Department of Environmental Protection, Division for Air Quality, 200 Fair Oaks Lane, 1st Floor, Frankfort, Kentucky 40610–1403.
Louisville Metro Air Pollution Control District, 850 Barret Avenue, Louisville, Kentucky 40204.
(T) State Louisiana: Louisiana Department of Environmental Quality, P.O. Box 4301, Baton Rouge, Louisiana 70821–4301. For a list of delegated standards for Louisiana (excluding Indian country), see paragraph (e)(2) of this section.
(U) State of Maine, Bureau of Air Quality Control, Department of Environmental Protection, State House, Station No. 17, Augusta, ME 04333.
(V) State of Maryland, Department of the Environment, 1800 Washington Boulevard, Suite 705, Baltimore, Maryland 21230.
(W) Commonwealth of Massachusetts, Division of Air Quality Control, Department of Environmental Protection, One Winter Street, 7th floor, Boston, MA 02108.
(X) State of Michigan: Michigan Department of Natural Resources and Environment, Air Quality Division, P.O. Box 30028, Lansing, Michigan 48909.
(Y) State of Minnesota: Minnesota Pollution Control Agency, Division of Air Quality, 520 Lafayette Road North, St. Paul, Minnesota 55155.
(Z) State of Mississippi: Hand Deliver or Courier: Mississippi Department of Environmental Quality, Office of Pollution Control, Air Division, 515 East Amite Street, Jackson, Mississippi 39201, Mailing Address: Mississippi Department of Environmental Quality, Office of Pollution Control, Air Division, P.O. Box 2261, Jackson, Mississippi 39225.

(AA) State of Missouri: Missouri Department of Natural Resources, Division of Environmental Quality, P.O. Box 176, Jefferson City, MO 65102.
(BB) State of Montana, Department of Environmental Quality, 1520 E. 6th Ave., PO Box 200901, Helena, MT 59620–0901.
Note: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.
(CC) State of Nebraska, Nebraska Department of Environmental Control, P.O. Box 94877, State House Station, Lincoln, NE 68509.
Lincoln-Lancaster County Health Department, Division of Environmental Health, 2200 St. Marys Avenue, Lincoln, NE 68502
(DD) Nevada:
Nevada Division of Environmental Protection, 901 South Stewart Street, Suite 4001, Carson City, NV 89701–5249.
Clark County Department of Air Quality and Environmental Management, 500 S. Grand Central Parkway, 1st Floor, P.O. Box 555210, Las Vegas, NV 89155–5210.
Washoe County Health District, Air Quality Management Division, 1001 E. 9th Street, Building A, Suite 115A, Reno, NV 89520.
Note: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.
(EE) State of New Hampshire, Air Resources Division, Department of Environmental Services, 64 North Main Street, Caller Box 2033, Concord, NH 03302–2033.
(FF) State of New Jersey: New Jersey Department of Environmental Protection, Division of Environmental Quality, Enforcement Element, John Fitch Plaza, CN–027, Trenton, NJ 08625.
(1) The following table lists the specific source and pollutant categories that have been delegated to the states in Region II. The (X) symbol is used to indicate each category that has been delegated.

		State			
	Subpart	**New Jersey**	**New York**	**Puerto Rico**	**Virgin Islands**
D	Fossil-Fuel Fired Steam Generators for Which Construction Commenced After August 17, 1971 (Steam Generators and Lignite Fired Steam Generators)	X	X	X	X
Da	Electric Utility Steam Generating Units for Which Construction Commenced After September 18, 1978	X		X	
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
E	Incinerators	X	X	X	X
F	Portland Cement Plants	X	X	X	X
G	Nitric Acid Plants	X	X	X	X
H	Sulfuric Acid Plants	X	X	X	X
I	Asphalt Concrete Plants	X	X	X	X
J	Petroleum Refineries—(All Categories)	X	X	X	X
K	Storage Vessels for Petroleum Liquids Constructed After June 11, 1973, and prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids Constructed After May 18, 1978	X	X	X	
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Ingot Production Plants	X	X	X	X

N	Iron and Steel Plants	X	X	X	X
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	X
Q	Primary Zinc Smelters	X	X	X	X
R	Primary Lead Smelters	X	X	X	X
S	Primary Aluminum Reduction Plants	X	X	X	X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate	X	X	X	X
Y	Coal Preparation Plants	X	X	X	X
Z	Ferroally Production Facilities	X	X	X	X
AA	Steel Plants: Electric Arc Furnaces	X	X	X	X
AAa	Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in Steel Plants	X	X	X	
BB	Kraft Pulp Mills	X	X	X	
CC	Glass Manufacturing Plants	X	X	X	
DD	Grain Elevators	X	X	X	
EE	Surface Coating of Metal Furniture	X	X	X	
GG	Stationary Gas Turbines	X	X	X	
HH	Lime Plants	X	X	X	
KK	Lead Acid Battery Manufacturing Plants	X	X		
LL	Metallic Mineral Processing Plants	X	X	X	
MM	Automobile and Light-Duty Truck Surface Coating Operations	X	X		
NN	Phosphate Rock Plants	X	X		
PP	Ammonium Sulfate Manufacturing Plants	X	X		
QQ	Graphic Art Industry Publication Rotogravure Printing	X	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	
SS	Industrial Surface Coating: Large Appliances	X	X	X	
TT	Metal Coil Surface Coating	X	X	X	
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	
VV	Equipment Leaks of Volatile Organic Compounds in Synthetic	X		X	

	Organic Chemical Manufacturing Industry				
WW	Beverage Can Surface Coating Industry	X	X	X	
XX	Bulk Gasoline Terminals	X	X	X	
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X		X	
HHH	Synthetic Fiber Production Facilities	X		X	
JJJ	Petroleum Dry Clearners	X	X	X	
KKK	Equipment Leaks of VOC from Onshore Natural Gas Processing Plants				
LLL	Onshore Natural Gas Processing Plants; SO_2Emissions		X		
OOO	Nonmetallic Mineral Processing Plants		X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants		X	X	

(GG) State of New Mexico: New Mexico Environment Department, 1190 St. Francis Drive, P.O. Box 26110, Santa Fe, New Mexico 87502. Note: For a list of delegated standards for New Mexico (excluding Bernalillo County and Indian country), see paragraph (e)(1) of this section.
(i) Albuquerque-Bernalillo County Air Quality Control Board, c/o Environmental Health Department, P.O. Box 1293, Albuquerque, New Mexico 87103.
(ii) [Reserved]
(HH) New York: New York State Department of Environmental Conservation, 50 Wolf Road Albany, New York 12233, attention: Division of Air Resources.
(II) State of North Carolina: North Carolina Department of Environment and Natural Resources, Division of Air Quality, 1641 Mail Service Center, Raleigh, North Carolina 27699–1641 or local agencies, Forsyth County Environmental Affairs, 201 North Chestnut Street, Winston-Salem, North Carolina 27101 or Forsyth County Air Quality Section, 537 North Spruce Street, Winston-Salem, North Carolina 27101; Mecklenburg County Land Use & Environmental Services Agency, Air Quality, 700 N. Tryon St., Suite 205, Charlotte, North Carolina 28202–2236; Western North Carolina Regional Air Quality Agency, 49 Mount Carmel Road, Asheville, North Carolina 28806.
(JJ) State of North Dakota, Division of Air Quality, North Dakota Department of Health, P.O. Box 5520, Bismarck, ND 58506–5520.
Note: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.
(KK) State of Ohio:
(i) Medina, Summit and Portage Counties; Director, Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308.
(ii) Stark County; Director, Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702–1544.
(iii) Butler, Clermont, Hamilton, and Warren Counties; Director, Hamilton County Department of Environmental Services, 250 William Howard Taft Road, Cincinnati, Ohio 45219–2660.
(iv) Cuyahoga County; Commissioner, Cleveland Department of Public Health, Division of Air Quality, 75 Erieview Plaza 2nd Floor, Cleveland, Ohio 44114.
(v) Clark, Darke, Greene, Miami, Montgomery, and Preble Counties; Director, Regional Air Pollution Control Agency, 117 South Main Street, Dayton, Ohio 45422–1280.
(vi) Lucas County and the City of Rossford (in Wood County); Director, City of Toledo, Division of Environmental Services, 348 South Erie Street, Toledo, OH 43604.
(vii) Adams, Brown, Lawrence, and Scioto Counties; Portsmouth Local Air Agency, 605 Washington Street, Third Floor, Portsmouth, OH 45662.
(viii) Allen, Ashland, Auglaize, Crawford, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Marion, Mercer, Ottawa, Paulding, Putnam, Richland, Sandusky, Seneca, Van Wert Williams, Wood (Except City of Rossford),

and Wyandot Counties; Ohio Environmental Protection Agency, Northwest District Office, Air Pollution Control, 347 North Dunbridge Road, Bowling Green, Ohio 43402.
(ix) Ashtabula, Caroll, Colombiana, Holmes, Lorain, and Wayne Counties; Ohio Environmental Protection Agency, Northeast District Office, Air Pollution Unit, 2110 East Aurora Road, Twinsburg, OH 44087.
(x) Athens, Belmont, Coshocton, Gallia, Guemsey, Harrison, Hocking, Jackson, Jefferson, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Tuscarawas, Vinton, and Washington Counties; Ohio Environmental Protection Agency, Southeast District Office, Air Pollution Unit, 2195 Front Street, Logan, OH 43138.
(xi) Champaign, Clinton, Highland, Logan, and Shelby Counties; Ohio Environmental Protection Agency, Southwest District Office, Air Pollution Unit, 401 East Fifth Street, Dayton, Ohio 45402–2911.
(xii) Delaware, Fairfield, Fayette, Franklin, Knox, Licking, Madison, Morrow, Pickaway, and Union Counties; Ohio Environmental Protection Agency, Central District Office, Air Pollution control, 50 West Town Street, Suite 700, Columbus, Ohio 43215.
(xiii) Geauga and Lake Counties; Lake County General Health District, Air Pollution Control, 33 Mill Street, Painesville, OH 44077.
(xiv) Mahoning and Trumbull Counties; Mahoning-Trumbull Air Pollution Control Agency, 345 Oak Hill Avenue, Suite 200, Youngstown, OH 44502.
(LL) State of Oklahoma, Oklahoma State Department of Health, Air Quality Service, P.O. Box 53551, Oklahoma City, OK 73152.
(i) Oklahoma City and County: Director, Oklahoma City-County Health Department, 921 Northeast 23rd Street, Oklahoma City, OK 73105.
(ii) Tulsa County: Tulsa City-County Health Department, 4616 East Fifteenth Street, Tulsa, OK 74112.
(MM) State of Oregon. (i) Oregon Department of Environmental Quality (ODEQ), 811 SW Sixth Avenue, Portland, OR 97204–1390, *http://www.deq.state.or.us.*
(ii) Lane Regional Air Pollution Authority (LRAPA), 1010 Main Street, Springfield, Oregon 97477, *http://www.lrapa.org.*
(NN)(i) City of Philadelphia, Department of Public Health, Air Management Services, 321 University Avenue, Philadelphia, Pennsylvania 19104.
(ii) Commonwealth of Pennsylvania, Department of Environmental Protection, Bureau of Air Quality Control, P.O. Box 8468, 400 Market Street, Harrisburg, Pennsylvania 17105.
(iii) Allegheny County Health Department, Bureau of Environmental Quality, Division of Air Quality, 301 39th Street, Pittsburgh, Pennsylvania 15201.
(OO) State of Rhode Island, Division of Air and Hazardous Materials, Department of Environmental Management, 291 Promenade Street, Providence, RI 02908.
(PP) State of South Carolina: South Carolina Department of Health and Environmental Control, 2600 Bull Street, Columbia, South Carolina 29201.
(QQ) State of South Dakota, Air Quality Program, Department of Environment and Natural Resources, Joe Foss Building, 523 East Capitol, Pierre, SD 57501–3181.
Note: For a table listing Region VIII's NSPS delegation status, see paragragh (c) of this section.
(RR) State of Tennessee: Tennessee Department of Environment and Conservation, Division of Air Pollution Control, 401 Church Street, 9th Floor, L&C Annex, Nashville, Tennessee 37243–1531.
Knox County Air Quality Management—Department of Public Health, 140 Dameron Avenue, Knoxville, TN 37917.
Air Pollution Control Bureau, Metropolitan Health Department, 311 23rd Avenue North, Nashville, TN 37203.
Chattanooga-Hamilton County Air Pollution Control Bureau, 6125 Preservation Drive, Chattanooga, TN 37416.
Memphis-Shelby County Health Department—Air Pollution Control Program, 814 Jefferson Avenue, Memphis, TN 38105.
(SS) State of Texas, Texas Air Control Board, 6330 Highway 290 East, Austin, TX 78723.
(TT) State of Utah, Division of Air Quality, Department of Environmental Quality, P.O. Box 144820, Salt Lake City, UT 84114–4820.
Note: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.
(UU) State of Vermont, Air Pollution Control Division, Agency of Natural Resources, Building 3 South, 103 South Main Street, Waterbury, VT 05676.
(VV) Commonwealth of Virginia, Department of Environmental Quality, 629 East Main Street, Richmond, Virginia 23219.

(WW) *State of Washington.* (i) Washington State Department of Ecology (Ecology), P.O. Box 47600, Olympia, WA 98504–7600, *http://www.ecy.wa.gov/*
(ii) Benton Clean Air Authority (BCAA), 650 George Washington Way, Richland, WA 99352–4289, *http://www.bcaa.net/*
(iii) Northwest Air Pollution Control Authority (NWAPA), 1600 South Second St., Mount Vernon, WA 98273–5202, *http://www.nwair.org/*
(iv) Olympic Regional Clean Air Agency (ORCAA), 909 Sleater-Kinney Road S.E., Suite 1, Lacey, WA 98503–1128, *http://www.orcaa.org/*
(v) Puget Sound Clean Air Agency (PSCAA), 110 Union Street, Suite 500, Seattle, WA 98101–2038, *http://www.pscleanair.org/*
(vi) Spokane County Air Pollution Control Authority (SCAPCA), West 1101 College, Suite 403, Spokane, WA 99201, *http://www.scapca.org/*
(vii) Southwest Clean Air Agency (SWCAA), 1308 NE. 134th St., Vancouver, WA 98685–2747, *http://www.swcleanair.org/*
(viii) Yakima Regional Clean Air Authority (YRCAA), 6 South 2nd Street, Suite 1016, Yakima, WA 98901, *http://co.yakima.wa.us/cleanair/default.htm*
(ix) The following table lists the delegation status of the New Source Performance Standards for the State of Washington. An "X" indicates the subpart has been delegated, subject to all the conditions and limitations set forth in Federal law and the letters granting delegation. Some authorities cannot be delegated and are retained by EPA. Refer to the letters granting delegation for a discussion of these retained authorities. The dates noted at the end of the table indicate the effective dates of Federal rules that have been delegated. Authority for implementing and enforcing any amendments made to these rules after these effective dates are not delegated.

NSPS Subparts Delegated to Washington Air Agencies

	Washington							
Subpart[1]	**Ecology**[2]	**BCAA**[3]	**NWAPA**[4]	**ORCAA**[5]	**PSCAA**[6]	**SCAPCA**[7]	**SWCAA**[8]	**YRCAA**[9]
A General Provisions	X	X	X	X	X	X	X	X
B Adoption and Submittal of State Plans for Designated Facilities								
C Emission Guidelines and Compliance Times								
Cb Large Municipal Waste Combustors that are Constructed on or before September 20, 1994 (Emission Guidelines and Compliance Times)								
Cc Municipal Solid Waste Landfills (Emission Guidelines and Compliance Times)								
Cd Sulfuric Acid Production Units (Emission Guidelines and Compliance Times)								
Ce Hospital/Medical/Infectious Waste Incinerators (Emission Guidelines and Compliance Times)								
D Fossil-Fuel-Fired Steam Generators for which Construction is Commenced after August 17, 1971	X	X	X	X	X	X	X	X

Da Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978	X	X	X	X	X	X	X	X
Db Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X	X	X	X	X
Dc Small Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X	X	X	X	X
E Incinerators	X	X	X	X	X	X	X	X
Ea Municipal Waste Combustors for which Construction is Commenced after December 20, 1989 and on or before September 20, 1994	X	X	X	X	X	X	X	X
Eb—Large Municipal Waste Combustors		X		X	X	X		
Ec—Hospital/Medical/Infectious Waste Incinerators	X	X	X	X	X	X		
F Portland Cement Plants	X	X	X	X	X	X	X	X
G Nitric Acid Plants	X	X	X	X	X	X	X	X
H Sulfuric Acid Plants	X	X	X	X	X	X	X	X
I Hot Mix Asphalt Facilities	X	X	X	X	X	X	X	X
J Petroleum Refineries	X	X	X	X	X	X	X	X
K Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and prior to May 19, 1978	X	X	X	X	X	X	X	X
Ka Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after May 18, 1978 and prior to July 23, 1984	X	X	X	X	X	X	X	X
Kb VOC Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	X	X	X	X	X	X	X	X
L Secondary Lead Smelters	X	X	X	X	X	X	X	X
M Secondary Brass and Bronze Production Plants	X	X	X	X	X	X	X	X
N Primary Emissions from Basic Oxygen Process Furnaces for which Construction is Commenced after	X	X	X	X	X	X	X	X

June 11, 1973								
Na Secondary Emissions from Basic Oxygen Process Steel-making Facilities for which Construction is Commenced after January 20, 1983	X	X	X	X	X	X	X	X
O Sewage Treatment Plants	X	X	X	X	X	X	X	X
P Primary Copper Smelters	X	X	X	X	X	X	X	X
Q Primary Zinc Smelters	X	X	X	X	X	X	X	X
R Primary Lead Smelters	X	X	X	X	X	X	X	X
S Primary Aluminum Reduction Plants[10]	X							
T Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X	X	X	X	X
U Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X	X	X	X	X
V Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X	X	X	X	X
W Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X	X	X	X	X
X Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	X	X	X	X	X
Y Coal Preparation Plants	X	X	X	X	X	X	X	X
Z Ferroalloy Production Facilities	X	X	X	X	X	X	X	X
AA Steel Plants: Electric Arc Furnaces Constructed after October 21, 1974 and on or before August 17, 1983	X	X	X	X	X	X	X	X
AAa Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed after August 7, 1983	X	X	X	X	X	X	X	X
BB Kraft Pulp Mills[11]	X							
CC Glass Manufacturing Plants	X	X	X	X	X	X	X	X
DD Grain Elevators	X	X	X	X	X	X	X	X
EE Surface Coating of Metal Furniture	X	X	X	X	X	X	X	X
GG Stationary Gas Turbines	X	X	X	X	X	X	X	X
HH Lime Manufacturing Plants	X	X	X	X	X	X	X	X
KK Lead-Acid Battery	X	X	X	X	X	X	X	X

Manufacturing Plants								
LL Metallic Mineral Processing Plants	X	X	X	X	X	X	X	X
MM Automobile and Light Duty Truck Surface Coating Operations	X	X	X	X	X	X	X	X
NN Phosphate Rock Plants	X	X	X	X	X	X	X	X
PP Ammonium Sulfate Manufacture	X	X	X	X	X	X	X	X
QQ Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	X	X	X	X	X
RR Pressure Sensitive Tape and Label Surface Coating Standards	X	X	X	X	X	X	X	X
SS Industrial Surface Coating: Large Appliances	X	X	X	X	X	X	X	X
TT Metal Coil Surface Coating	X	X	X	X	X	X	X	X
UU Asphalt Processing and Asphalt Roof Manufacture	X	X	X	X	X	X	X	X
VV Equipment Leaks of VOC in Synthetic Organic Chemical Manufacturing Industry	X	X	X	X	X	X	X	X
WW Beverage Can Surface Coating Industry	X	X	X	X	X	X	X	X
XX Bulk Gasoline Terminals	X	X	X	X	X	X	X	X
AAA New Residential Wood Heaters								
BBB Rubber Tire Manufacturing Industry	X	X	X	X	X	X	X	X
DDD VOC Emissions from Polymer Manufacturing Industry	X	X	X	X	X	X	X	X
FFF Flexible Vinyl and Urethane Coating and Printing	X	X	X	X	X	X	X	X
GGG Equipment Leaks of VOC in Petroleum Refineries	X	X	X	X	X	X	X	X
HHH Synthetic Fiber Production Facilities	X	X	X	X	X	X	X	X
III VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes	X	X	X	X	X	X	X	X
JJJ Petroleum Dry Cleaners	X	X	X	X	X	X	X	X
KKK Equipment Leaks of VOC from	X	X	X	X	X	X	X	X

Onshore Natural Gas Processing Plants								
LLL Onshore Natural Gas Processing: SO_2Emissions	X	X	X	X	X	X	X	X
NNN VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations	X	X	X	X	X	X	X	X
OOO Nonmetallic Mineral Processing Plants			X		X		X	
PPP Wool Fiberglass Insulation Manufacturing Plants	X	X	X	X	X	X	X	X
QQQ VOC Emissions from Petroleum Refinery Wastewater Systems	X	X	X	X	X	X	X	X
RRR VOCs from Synthetic Organic Chemical Manufacturing Industry Reactor Processes	X	X	X	X	X	X	X	X
SSS Magnetic Tape Coating Facilities	X	X	X	X	X	X	X	X
TTT Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	X	X	X	X	X
UUU Calciners and Dryers in Mineral Industries	X	X	X	X	X	X	X	X
VVV Polymeric Coating of Supporting Substrates Facilities	X	X	X	X	X	X	X	X
WWW Municipal Solid Waste Landfills	X	X	X	X	X	X	X	X
AAAA Small Municipal Waste Combustion Units for which Construction is Commenced after August 30, 1999 or for which Modification or Reconstruction is Commenced after June 6, 2001	X	X		X	X	X		X
BBBB Small Municipal Waste Combustion Units Constructed on or before August 30, 1999 (Emission Guidelines and Compliance Times)								
CCCC 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	X	X		X	X	X		X

DDDD Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or before November 30, 1999 (Emission Guidelines and Compliance Times)								

[1]Any authority within any subpart of this part that is not delegable, is not delegated. Please refer to Attachment B to the delegation letters for a listing of the NSPS authorities excluded from delegation.
[2]Washington State Department of Ecology, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.
[3]Benton Clean Air Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.
[4]Northwest Air Pollution Authority, for all NSPS delegated, as in effect on July 1, 2000.
[5]Olympic Regional Clean Air Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.
[6]Puget Sound Clean Air Authority, for all NSPS delegated, as in effect on July 1, 2002.
[7]Spokane County Air Pollution Control Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.
[8]Southwest Clean Air Agency, for all NSPS delegated, as in effect on July 1, 2000.
[9]Yakima Regional Clean Air Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.
[10]Subpart S of this part is not delegated to local agencies in Washington because the Washington State Department of Ecology retains sole authority to regulate Primary Aluminum Plants, pursuant to Washington Administrative Code 173–415–010.
[11]Subpart BB of this part is not delegated to local agencies in Washington because the Washington State Department of Ecology retains sole authority to regulate Kraft and Sulfite Pulping Mills, pursuant to Washington State Administrative Code 173–405–012 and 173–410–012.
(XX) State of West Virginia, Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE., Charleston, West Virginia 25304.
(YY) State of Wisconsin: Wisconsin Department of Natural Resouces, 101 South Webster St., P.O. Box 7921, Madison, Wisconsin 53707–7921.
(ZZ) State of Wyoming, Department of Environmental Quality, Air Quality Division, Herschler Building, 122 West 25th Street, Cheyenne, WY 82002.
Note: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.
(AAA) Territory of Guam: Guam Environmental Protection Agency, P.O. Box 22439 GMF, Barrigada, Guam 96921.
Note: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.
(BBB) Commonwealth of Puerto Rico: Commonwealth of Puerto Rico Environmental Quality Board, P.O. Box 11488, Santurce, PR 00910, Attention: Air Quality Area Director (see table under §60.4(b)(FF)(1)).
(CCC) U.S. Virgin Islands: U.S. Virgin Islands Department of Conservation and Cultural Affairs, P.O. Box 578, Charlotte Amalie, St. Thomas, VI 00801.
(DDD) American Samoa: American Samoa Environmental Protection Agency, P.O. Box PPA, Pago Pago, American Samoa 96799.
Note: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.
(EEE) Commonwealth of the Northern Mariana Islands: CNMI Division of Environmental Quality, P.O. Box 501304, Saipan, MP 96950.
Note: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.
(c) The following is a table indicating the delegation status of New Source Performance Standards for Region VIII.

Delegation Status of New Source Performance Standards
[(NSPS) for Region VIII]

Subpart	**CO**	**MT**	**ND**	**SD**	**UT**	**WY**
A—General Provisions	(*)	(*)	(*)	(*)	(*)	(*)
D—Fossil Fuel Fired Steam Generators	(*)	(*)	(*)	(*)	(*)	(*)
Da—Electric Utility Steam Generators	(*)	(*)	(*)	(*)	(*)	(*)
Db—Industrial-Commercial—Institutional Steam Generators	(*)	(*)	(*)	(*)	(*)	(*)
Dc—Industrial–Commercial–Institutional Steam Generators	(*)	(*)	(*)	(*)	(*)	(*)
E—Incinerators	(*)	(*)	(*)	(*)	(*)	(*)
Ea—Municipal Waste Combustors	(*)	(*)	(*)	(*)	(*)	(*)
Eb—Large Municipal Waste Combustors		(*)		(*)	(*)	(*)
Ec—Hospital/Medical/Infectious Waste Incinerators	(*)	(*)	(*)	(*)	(*)	(*)
F—Portland Cement Plants	(*)	(*)	(*)	(*)	(*)	(*)
G—Nitric Acid Plants	(*)	(*)	(*)		(*)	(*)
H—Sulfuric Acid Plants	(*)	(*)	(*)		(*)	(*)
I—Asphalt Concrete Plants	(*)	(*)	(*)	(*)	(*)	(*)
J—Petroleum Refineries	(*)	(*)	(*)		(*)	(*)
K—Petroleum Storage Vessels (after 6/11/73 & prior to 5/19/78)	(*)	(*)	(*)	(*)	(*)	(*)
Ka—Petroleum Storage Vessels (after 5/18/78 & prior to 7/23/84)	(*)	(*)	(*)	(*)	(*)	(*)
Kb—Petroleum Storage Vessels (after 7/23/84)	(*)	(*)	(*)	(*)	(*)	(*)
L—Secondary Lead Smelters	(*)	(*)			(*)	(*)
M—Secondary Brass and Bronze Production						
Plants	(*)	(*)			(*)	(*)
N—Primary Emissions from Basic Oxygen Process Furnaces (after 6/11/73)	(*)	(*)			(*)	(*)
Na—Secondary Emissions from Basic Oxygen Process Furnaces (after 1/20/83)	(*)	(*)			(*)	(*)
O—Sewage Treatment Plants	(*)	(*)	(*)	(*)	(*)	(*)
P—Primary Copper Smelters	(*)	(*)			(*)	(*)
Q—Primary Zinc Smelters	(*)	(*)			(*)	(*)
R—Primary Lead Smelters	(*)	(*)			(*)	(*)
S—Primary Aluminum Reduction Plants	(*)	(*)			(*)	(*)
T—Phosphate Fertilizer Industry: Wet Process Phosphoric Plants	(*)	(*)	(*)		(*)	(*)
U—Phosphate Fertilizer Industry: Superphosphoric Acid Plants	(*)	(*)	(*)		(*)	(*)

V—Phosphate Fertilizer Industry: Diammonium Phosphate Plants	(*)	(*)	(*)		(*)	(*)
W—Phosphate Fertilizer Industry: Triple Superphosphate Plants	(*)	(*)	(*)		(*)	(*)
X—Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	(*)	(*)	(*)		(*)	(*)
Y—Coal Preparation Plants	(*)	(*)	(*)	(*)	(*)	(*)
Z—Ferroalloy Production Facilities	(*)	(*)	(*)		(*)	(*)
AA—Steel Plants: Electric Arc Furnaces (10/21/74–8/17/83)	(*)	(*)	(*)		(*)	(*)
AAa—Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels (after 8/7/83)	(*)	(*)	(*)		(*)	(*)
BB—Kraft Pulp Mills	(*)	(*)			(*)	(*)
CC—Glass Manufacturing Plants	(*)	(*)	(*)		(*)	(*)
DD—Grain Elevator	(*)	(*)	(*)	(*)	(*)	(*)
EE—Surface Coating of Metal Furniture	(*)	(*)	(*)		(*)	(*)
GG—Stationary Gas Turbines	(*)	(*)	(*)	(*)	(*)	(*)
HH—Lime Manufacturing Plants	(*)	(*)	(*)	(*)	(*)	(*)
KK—Lead-Acid Battery Manufacturing Plants	(*)	(*)	(*)		(*)	(*)
LL—Metallic Mineral Processing Plants	(*)	(*)	(*)	(*)	(*)	(*)
MM—Automobile & Light Duty Truck Surface Coating Operations	(*)	(*)	(*)		(*)	(*)
NN—Phosphate Rock Plants	(*)	(*)	(*)		(*)	(*)
PP—Ammonium Sulfate Manufacturing	(*)	(*)	(*)		(*)	(*)
QQ—Graphic Arts Industry: Publication Rotogravure Printing	(*)	(*)	(*)	(*)	(*)	(*)
RR—Pressure Sensitive Tape & Label Surface Coating	(*)	(*)	(*)	(*)	(*)	(*)
SS—Industrial Surface Coating: Large Applications	(*)	(*)	(*)		(*)	(*)
TT—Metal Coil Surface Coating	(*)	(*)	(*)		(*)	(*)
UU—Asphalt Processing & Asphalt Roofing Manufacture	(*)	(*)	(*)		(*)	(*)
VV—Synthetic Organic Chemicals Manufacturing: Equipment Leaks of VOC	(*)	(*)	(*)	(*)	(*)	(*)
WW—Beverage Can Surface Coating Industry	(*)	(*)	(*)		(*)	(*)
XX—Bulk Gasoline Terminals	(*)	(*)	(*)	(*)	(*)	(*)
AAA—Residential Wood Heaters	(*)	(*)	(*)	(*)	(*)	(*)
BBB—Rubber Tires	(*)	(*)	(*)		(*)	(*)
DDD—VOC Emissions from Polymer Manufacturing Industry	(*)	(*)	(*)		(*)	(*)
FFF—Flexible Vinyl & Urethane Coating & Printing	(*)	(*)	(*)		(*)	(*)
GGG—Equipment Leaks of VOC in Petroleum Refineries	(*)	(*)	(*)		(*)	(*)
HHH—Synthetic Fiber Production	(*)	(*)	(*)		(*)	(*)

III—VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes		(*)	(*)		(*)	(*)
JJJ—Petroleum Dry Cleaners	(*)	(*)	(*)	(*)	(*)	(*)
KKK—Equipment Leaks of VOC from Onshore Natural Gas Processing Plants	(*)	(*)	(*)		(*)	(*)
LLL—Onshore Natural Gas Processing: SO_2Emissions	(*)	(*)	(*)		(*)	(*)
NNN—VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry Distillation Operations	(*)	(*)	(*)	(*)	(*)	(*)
OOO—Nonmetallic Mineral Processing Plants	(*)	(*)	(*)	(*)	(*)	(*)
PPP—Wool Fiberglass Insulation Manufacturing Plants	(*)	(*)	(*)		(*)	(*)
QQQ—VOC Emissions from Petroleum Refinery Wastewater Systems	(*)	(*)	(*)		(*)	(*)
RRR—VOC Emissions from Synthetic Organic Chemistry Manufacturing Industry (SOCMI) Reactor Processes	(*)	(*)	(*)	(*)	(*)	(*)
SSS—Magnetic Tape Industry	(*)	(*)	(*)	(*)	(*)	(*)
TTT—Plastic Parts for Business Machine Coatings	(*)	(*)	(*)		(*)	(*)
UUU—Calciners and Dryers in Mineral Industries	(*)	(*)	(*)	(*)	(*)	(*)
VVV—Polymeric Coating of Supporting Substrates	(*)	(*)	(*)		(*)	(*)
WWW—Municipal Solid Waste Landfills	(*)	(*)	(*)	(*)	(*)	(*)
AAAA-Small Municipal Waste Combustors		(*)	(*)		(*)	(*)
CCCC-Commercial and Industrial Solid Waste Incineration Units		(*)	(*)		(*)	(*)
EEEE—Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced On or After June 16, 2006						(*)

(*) Indicates approval of State regulation.
(d) The following tables list the specific part 60 standards that have been delegated unchanged to the air pollution control agencies in Region IX. The (X) symbol is used to indicate each standard that has been delegated. The following provisions of this subpart are not delegated: §§60.4(b), 60.8(b), 60.9, 60.11(b), 60.11(e), 60.13(a), 60.13(d)(2), 60.13(g), 60.13(i).
(1) *Arizona.* The following table identifies delegations for Arizona:

Delegation Status for New Source Performance Standards for Arizona

		Air Pollution Control Agency			
	Subpart	**Arizona DEQ**	**Maricopa County**	**Pima County**	**Pinal County**
A	General Provisions	X	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	X	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X

Dc	Small Industrial Steam Generating Units	X	X	X	X
E	Incinerators	X	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X	X	X	X
Eb	Municipal Waste Combustors Constructed After September 20, 1994	X	X	X	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X	X	X	
F	Portland Cement Plants	X	X	X	X
G	Nitric Acid Plants	X	X	X	X
H	Sulfuric Acid Plant	X	X	X	X
I	Hot Mix Asphalt Facilities	X	X	X	X
J	Petroleum Refineries	X	X	X	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007				
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	X	X
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	X	X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	X	X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X	X	X	X
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	X
Q	Primary Zinc Smelters	X	X	X	X
R	Primary Lead Smelters	X	X	X	X
S	Primary Aluminum Reduction Plants	X	X	X	X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X

V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	X
Y	Coal Preparation Plants	X	X	X	X
Z	Ferroalloy Production Facilities	X	X	X	X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	X	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X	X	X	X
BB	Kraft Pulp Mills	X	X	X	X
CC	Glass Manufacturing Plants	X	X	X	X
DD	Grain Elevators	X	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X	X
FF	(Reserved)				
GG	Stationary Gas Turbines	X	X	X	X
HH	Lime Manufacturing Plants	X	X	X	X
KK	Lead-Acid Battery Manufacturing Plants	X	X	X	X
LL	Metallic Mineral Processing Plants	X	X	X	X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X	X
NN	Phosphate Rock Plants	X	X	X	X
PP	Ammonium Sulfate Manufacture	X	X	X	X
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	X
SS	Industrial Surface Coating: Large Appliances	X	X	X	X
TT	Metal Coil Surface Coating	X	X	X	X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X	X	X	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	X			
WW	Beverage Can Surface Coating Industry	X	X	X	X
XX	Bulk Gasoline Terminals	X	X	X	X
AAA	New Residential Wool Heaters	X	X	X	X

BBB	Rubber Tire Manufacturing Industry	X	X	X	X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X	X	X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	X
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	X	X
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	X			
HHH	Synthetic Fiber Production Facilities	X	X	X	X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X	X	X	X
JJJ	Petroleum Dry Cleaners	X	X	X	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	X	X
LLL	Onshore Natural Gas Processing: SO_2Emissions	X	X	X	X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X	X	X
OOO	Nonmetallic Mineral Processing Plants	X	X	X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	X	X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X	X	X	X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X	X		
SSS	Magnetic Tape Coating Facilities	X	X	X	X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	X
UUU	Calciners and Dryers in Mineral Industries	X	X	X	
VVV	Polymeric Coating of Supporting Substrates Facilities	X	X	X	X
WWW	Municipal Solid Waste Landfills	X	X	X	
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commended After June 6, 2001	X	X	X	
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or	X	X	X	

	for Which Modification or Reconstruction Is Commenced on or After June 1, 2001				
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	X	X		
IIII	Stationary Compression Ignition Internal Combustion Engines	X			
JJJJ	Stationary Spark Ignition Internal Combustion Engines				
KKKK	Stationary Combustion Turbines	X			
GGGG	(Reserved)				

(2) *California.* The following tables identify delegations for each of the local air pollution control agencies of California.

(i) Delegations for Amador County Air Pollution Control District, Antelope Valley Air Pollution Control District, Bay Area Air Quality Management District, and Butte County Air Pollution Control District are shown in the following table:

Delegation Status for New Source Performance Standards for Amador County APCD, Antelope Valley APCD, Bay Area AQMD, and Butte County AQMD

		Air pollution control agency			
	Subpart	**Amador County APCD**	**Antelope Valley APCD**	**Bay Area AQMD**	**Butte County APCD**
A	General Provisions				
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971			X	
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978			X	
Db	Industrial-Commercial-Institutional Steam Generating Units			X	
Dc	Small Industrial Steam Generating Units			X	
E	Incinerators			X	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994			X	
Eb	Municipal Waste Combustors Constructed After September 20, 1994				
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				
F	Portland Cement Plants			X	
G	Nitric Acid Plants			X	
H	Sulfuric Acid Plants			X	
I	Hot Mix Asphalt Facilities			X	

J	Petroleum Refineries			X	
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978			X	
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984			X	
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984			X	
L	Secondary Lead Smelters			X	
M	Secondary Brass and Bronze Production Plants			X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973			X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983			X	
O	Sewage Treatment Plants			X	
P	Primary Copper Smelters			X	
Q	Primary Zinc Smelters			X	
R	Primary Lead Smelters			X	
S	Primary Aluminum Reduction Plants			X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants				
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants			X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants			X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants			X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities			X	
Y	Coal Preparation Plants			X	
Z	Ferroalloy Production Facilities			X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983			X	

AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983			X	
BB	Kraft pulp Mills			X	
CC	Glass Manufacturing Plants			X	
DD	Grain Elevators			X	
EE	Surface Coating of Metal Furniture			X	
FF	(Reserved)				
GG	Stationary Gas Turbines			X	
HH	Lime Manufacturing Plants			X	
KK	Lead-Acid Battery Manufacturing Plants			X	
LL	Metallic Mineral Processing Plants			X	
MM	Automobile and Light Duty Trucks Surface Coating Operations			X	
NN	Phosphate Rock Plants			X	
PP	Ammonium Sulfate Manufacture			X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing			X	
RR	Pressure Sensitive Tape and Label Surface Coating Operations			X	
SS	Industrial Surface Coating: Large Appliances			X	
TT	Metal Coil Surface Coating			X	
UU	Asphalt Processing and Asphalt Roofing Manufacture			X	
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry			X	
WW	Beverage Can Surface Coating Industry			X	
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters			X	
BBB	Rubber Tire Manufacturing Industry			X	
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry			X	
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing			X	
GGG	Equipment Leaks of VOC in Petroleum Refineries			X	
HHH	Synthetic Fiber Production Facilities			X	

III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes				
JJJ	Petroleum Dry Cleaners			X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants			X	
LLL	Onshore Natural Gas Processing: SO2 Emissions				
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations			X	
OOO	Nonmetallic Mineral Processing Plants			X	
PPP	Wool Fiberglass Insulation Manufacturing Plants			X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems				
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes				
SSS	Magnetic Tape Coating Facilities			X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines			X	
UUU	Calciners and Dryers in Mineral Industries			X	
VVV	Polymeric Coating of Supporting Substrates Facilities			X	
WWW	Municipal Solid Waste Landfills				

(ii) [Reserved]
(iii) Delegations for Glenn County Air Pollution Control District, Great Basin Unified Air Pollution Control District, Imperial County Air Pollution Control District, and Kern County Air Pollution Control District are shown in the following table:

Delegation Status for New Source Performance Standards for Glenn County APCD, Great Basin Unified APCD, Imperial County APCD, and Kern County APCD

		Air pollution control agency			
	Subpart	**Glenn County APCD**	**Great Basin Unified APCD**	**Imperial County APCD**	**Kern County APCD**
A	General Provisions		X		X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971		X		X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978		X		X

Db	Industrial-Commercial-Institutional Steam Generating Units		X		X
Dc	Small Industrial Steam Generating Units		X		X
E	Incinerators		X		X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994		X		
Eb	Municipal Waste Combustors Constructed After September 20, 1994				
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				
F	Portland Cement Plants		X		X
G	Nitric Acid Plants		X		X
H	Sulfuric Acid Plants		X		
I	Hot Mix Asphalt Facilities		X		X
J	Petroleum Refineries		X		X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978		X		X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X		X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984		X		X
L	Secondary Lead Smelters		X		X
M	Secondary Brass and Bronze Production Plants		X		X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973		X		X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983		X		X
O	Sewage Treatment Plants		X		X
P	Primary Copper Smelters		X		X
Q	Primary Zinc Smelters		X		X
R	Primary Lead Smelters		X		X
S	Primary Aluminum Reduction Plants		X		X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X		X

U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X		X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X		X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X		X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities		X		X
Y	Coal Preparation Plants		X		X
Z	Ferroalloy Production Facilities		X		X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983		X		X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983		X		X
BB	Kraft pulp Mills		X		X
CC	Glass Manufacturing Plants		X		X
DD	Grain Elevators		X		X
EE	Surface Coating of Metal Furniture		X		X
FF	(Reserved)				
GG	Stationary Gas Turbines		X		X
HH	Lime Manufacturing Plants		X		X
KK	Lead-Acid Battery Manufacturing Plants		X		X
LL	Metallic Mineral Processing Plants		X		X
MM	Automobile and Light Duty Trucks Surface Coating Operations		X		X
NN	Phosphate Rock Plants		X		X
PP	Ammonium Sulfate Manufacture		X		X
QQ	Graphic Arts Industry: Publication Rotogravure Printing		X		X
RR	Pressure Sensitive Tape and Label Surface Coating Operations		X		X
SS	Industrial Surface Coating: Large Appliances		X		X
TT	Metal Coil Surface Coating		X		X
UU	Asphalt Processing and Asphalt Roofing Manufacture		X		X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry		X		X
WW	Beverage Can Surface Coating Industry		X		X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters		X		X

BBB	Rubber Tire Manufacturing Industry		X		X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry		X		X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing		X		X
GGG	Equipment Leaks of VOC in Petroleum Refineries		X		X
HHH	Synthetic Fiber Production Facilities		X		X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes		X		X
JJJ	Petroleum Dry Cleaners		X		X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants		X		X
LLL	Onshore Natural Gas Processing: SO2 Emissions				X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations		X		X
OOO	Nonmetallic Mineral Processing Plants		X		X
PPP	Wool Fiberglass Insulation Manufacturing Plants		X		X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems		X		X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes				X
SSS	Magnetic Tape Coating Facilities		X		X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		X	X	
UUU	Calciners and Dryers in Mineral Industries		X		X
VVV	Polymeric Coating of Supporting Substrates Facilities		X		X
WWW	Municipal Solid Waste Landfills				X

(iv) Delegations for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District are shown in the following table:

Delegation Status for New Source Performance Standards for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District

		Air pollution control agency			
	Subpart	Lake County AQMD	Lassen County APCD	Mariposa County AQMD	Mendocino County AQMD
A	General Provisions	X			X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X			X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X			X
Db	Industrial-Commercial-Institutional Steam Generating Units	X			
Dc	Small Industrial Steam Generating Units	X			X
E	Incinerators	X			X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X			X
Eb	Municipal Waste Combustors Constructed After September 20, 1994				
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				
F	Portland Cement Plants	X			X
G	Nitric Acid Plants	X			X
H	Sulfuric Acid Plants	X			X
I	Hot Mix Asphalt Facilities	X			X
J	Petroleum Refineries	X			X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X			X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X			X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X			X

L	Secondary Lead Smelters	X			X
M	Secondary Brass and Bronze Production Plants	X			X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X			X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X			X
O	Sewage Treatment Plants	X			X
P	Primary Copper Smelters	X			X
Q	Primary Zinc Smelters	X			X
R	Primary Lead Smelters	X			X
S	Primary Aluminum Reduction Plants	X			X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X			X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X			X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X			X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X			X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X			X
Y	Coal Preparation Plants	X			X
Z	Ferroalloy Production Facilities	X			X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X			X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X			X
BB	Kraft Pulp Mills	X			X
CC	Glass Manufacturing Plants	X			X
DD	Grain Elevators	X			X
EE	Surface Coating of Metal Furniture	X			X
FF	(Reserved)				
GG	Stationary Gas Turbines	X			X
HH	Lime Manufacturing Plants	X			X
KK	Lead-Acid Battery Manufacturing Plants	X			X

LL	Metallic Mineral Processing Plants	X			X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X			X
NN	Phosphate Rock Plants	X			X
PP	Ammonium Sulfate Manufacture	X			X
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X			X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X			X
SS	Industrial Surface Coating: Large Appliances	X			X
TT	Metal Coil Surface Coating	X			X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X			X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X			X
WW	Beverage Can Surface Coating Industry	X			X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters	X			X
BBB	Rubber Tire Manufacturing Industry	X			X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X			X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X			X
GGG	Equipment Leaks of VOC in Petroleum Refineries	X			X
HHH	Synthetic Fiber Production Facilities	X			X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X			X
JJJ	Petroleum Dry Cleaners	X			X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X			X
LLL	Onshore Natural Gas Processing: SO2 Emissions	X			X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X			X
OOO	Nonmetallic Mineral Processing Plants	X			X

PPP	Wool Fiberglass Insulation Manufacturing Plants	X			X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X			X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X			
SSS	Magnetic Tape Coating Facilities	X			X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines				
UUU	Calciners and Dryers in Mineral Industries	X			X
VVV	Polymeric Coating of Supporting Substrates Facilities	X			X
WWW	Municipal Solid Waste Landfills	X			

(v) Delegations for Modoc County Air Pollution Control District, Mojave Desert Air Quality Management District, Monterey Bay Unified Air Pollution Control District, and North Coast Unified Air Pollution Control District are shown in the following table:

Delegation Status for New Source Performance Standards for Modoc County Air Pollution Control District, Mojave Desert Air Quality Management District, Monterey Bay Unified Air Pollution Control District, and North Coast Unified Air Pollution Control District

		Air pollution control agency			
	Subpart	**Modoc County APCD**	**Mojave Desert AQMD**	**Monterey Bay Unified APCD**	**North Coast Unified AQMD**
A	General Provisions	X		X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X		X	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X		X	X
Dc	Small Industrial Steam Generating Units			X	
E	Incinerators	X	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994				
Eb	Municipal Waste Combustors Constructed After September 20, 1994				
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				
F	Portland Cement Plants	X	X	X	X

G	Nitric Acid Plants	X	X	X	X
H	Sulfuric Acid Plants	X	X	X	X
I	Hot Mix Asphalt Facilities	X	X	X	X
J	Petroleum Refineries	X	X	X	X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X		X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X		X	X
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	X	X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	X	X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X		X	X
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X		X	X
Q	Primary Zinc Smelters	X		X	X
R	Primary Lead Smelters	X		X	X
S	Primary Aluminum Reduction Plants	X		X	X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	X
Y	Coal Preparation Plants	X	X	X	X

Z	Ferroalloy Production Facilities	X		X	X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	X	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X		X	X
BB	Kraft pulp Mills	X		X	X
CC	Glass Manufacturing Plants	X		X	X
DD	Grain Elevators	X		X	X
EE	Surface Coating of Metal Furniture	X		X	X
FF	(Reserved)				
GG	Stationary Gas Turbines	X		X	X
HH	Lime Manufacturing Plants	X		X	X
KK	Lead-Acid Battery Manufacturing Plants	X		X	X
LL	Metallic Mineral Processing Plants	X		X	X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X		X	X
NN	Phosphate Rock Plants	X		X	X
PP	Ammonium Sulfate Manufacture	X		X	X
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X		X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X		X	X
SS	Industrial Surface Coating: Large Appliances	X		X	X
TT	Metal Coil Surface Coating	X		X	X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X		X	X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X		X	X
WW	Beverage Can Surface Coating Industry	X		X	X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters	X		X	X
BBB	Rubber Tire Manufacturing Industry	X		X	X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer manufacturing Industry	X		X	
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X		X	X

GGG	Equipment Leaks of VOC in Petroleum Refineries	X		X	X
HHH	Synthetic Fiber Production Facilities	X		X	X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes				
JJJ	Petroleum Dry Cleaners	X		X	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X		X	X
LLL	Onshore Natural Gas Processing: SO2 Emissions	X		X	X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X		X	
OOO	Nonmetallic Mineral Processing Plants	X		X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X		X	X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X		X	X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes				
SSS	Magnetic Tape Coating Facilities	X		X	X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X		X	X
UUU	Calciners and Dryers in Mineral Industries			X	
VVV	Polymeric Coating of Supporting Substrates Facilities			X	X
WWW	Municipal Solid Waste Landfills				

(vi) Delegations for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District are shown in the following table:

Delegation Status for New Source Performance Standards for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District

		Air pollution control agency			
	Subpart	**Northern Sierra AQMD**	**Northern Sonoma County APCD**	**Placer County APCD**	**Sacramento Metropolitan AQMD**
A	General Provisions		X		X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971		X		X

Da	Electric Utility Steam Generating Units Constructed After September 18, 1978		X		X
Db	Industrial-Commercial-Institutional Steam Generating Units				X
Dc	Small Industrial Steam Generating Units				X
E	Incinerators		X		X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994				X
Eb	Municipal Waste Combustors Constructed After September 20, 1994				X
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				X
F	Portland Cement Plants		X		X
G	Nitric Acid Plants		X		X
H	Sulfuric Acid Plants		X		X
I	Hot Mix Asphalt Facilities		X		X
J	Petroleum Refineries		X		X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978		X		X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X		X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984				X
L	Secondary Lead Smelters		X		X
M	Secondary Brass and Bronze Production Plants		X		X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973		X		X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983				X
O	Sewage Treatment Plants		X		X
P	Primary Copper Smelters		X		X

Q	Primary Zinc Smelters		X		X
R	Primary Lead Smelters		X		X
S	Primary Aluminum Reduction Plants		X		X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X		X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X		X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X		X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X		X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities		X		X
Y	Coal Preparation Plants		X		X
Z	Ferroalloy Production Facilities		X		X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983		X		X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983				X
BB	Kraft pulp Mills		X		X
CC	Glass Manufacturing Plants		X		X
DD	Grain Elevators		X		X
EE	Surface Coating of Metal Furniture				X
FF	(Reserved)				
GG	Stationary Gas Turbines		X		X
HH	Lime Manufacturing Plants		X		X
KK	Lead-Acid Battery Manufacturing Plants				X
LL	Metallic Mineral Processing Plants				X
MM	Automobile and Light Duty Trucks Surface Coating Operations		X		X
NN	Phosphate Rock Plants				X
PP	Ammonium Sulfate Manufacture		X		X
QQ	Graphic Arts Industry: Publication Rotogravure Printing				X
RR	Pressure Sensitive Tape and Label Surface Coating Operations				X

SS	Industrial Surface Coating: Large Appliances				X
TT	Metal Coil Surface Coating				X
UU	Asphalt Processing and Asphalt Roofing Manufacture				X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry				X
WW	Beverage Can Surface Coating Industry				X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters				X
BBB	Rubber Tire Manufacturing Industry				X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry				X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing				X
GGG	Equipment Leaks of VOC in Petroleum Refineries				X
HHH	Synthetic Fiber Production Facilities				X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes				X
JJJ	Petroleum Dry Cleaners				X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants				X
LLL	Onshore Natural Gas Processing: SO2 Emissions				X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations				X
OOO	Nonmetallic Mineral Processing Plants				X
PPP	Wool Fiberglass Insulation Manufacturing Plants				X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems				X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes				X
SSS	Magnetic Tape Coating Facilities				X
TTT	Industrial Surface Coating: Surface Coating of				X

	Plastic Parts for Business Machines				
UUU	Calciners and Dryers in Mineral Industries				X
VVV	Polymeric Coating of Supporting Substrates Facilities				X
WWW	Municipal Solid Waste Landfills				X

(vii) Delegations for San Diego County Air Pollution Control District, San Joaquin Valley Unified Air Pollution Control District, San Luis Obispo County Air Pollution Control District, and Santa Barbara County Air Pollution Control District are shown in the following table:

Delegation Status for New Source Performance Standards for San Diego County Air Pollution Control District, San Joaquin Valley Unified Air Pollution Control District, San Luis Obispo County Air Pollution Control District, and Santa Barbara County Air Pollution Control District

		Air Pollution Control Agency			
	Subpart	**San Diego County APCD**	**San Joaquin Valley Unified APCD**	**San Luis Obispo County APCD**	**Santa Barbara County APCD**
A	General Provisions	X	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	X	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
Dc	Small Industrial Steam Generating Units	X	X	X	
E	Incinerators	X	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989, and On or Before September 20, 1994	X	X	X	
Eb	Municipal Waste Combustors Constructed After September 20, 1994	X	X		
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X			
F	Portland Cement Plants	X	X	X	
G	Nitric Acid Plants	X	X	X	
H	Sulfuric Acid Plants	X	X	X	
I	Hot Mix Asphalt Facilities	X	X	X	X
J	Petroleum Refineries	X	X	X	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007				

K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	X	X
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	X	X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X	X	X	
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	
Q	Primary Zinc Smelters	X	X	X	
R	Primary Lead Smelters	X	X	X	
S	Primary Aluminum Reduction Plants	X	X	X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	
Y	Coal Preparation Plants	X	X	X	
Z	Ferroalloy Production Facilities	X	X	X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974, and On or Before August 17, 1983	X	X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X	X	X	
BB	Kraft pulp Mills	X	X	X	
CC	Glass Manufacturing Plants	X	X	X	X

DD	Grain Elevators	X	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X	
FF	(Reserved)				
GG	Stationary Gas Turbines	X	X	X	X
HH	Lime Manufacturing Plants	X	X	X	
KK	Lead-Acid Battery Manufacturing Plants	X	X	X	
LL	Metallic Mineral Processing Plants	X	X	X	
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X	
NN	Phosphate Rock Plants	X	X	X	
PP	Ammonium Sulfate Manufacture	X	X	X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	
SS	Industrial Surface Coating: Large Appliances	X	X	X	
TT	Metal Coil Surface Coating	X	X	X	
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X	X	X	
VVa	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006				
WW	Beverage Can Surface Coating Industry	X	X	X	
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters	X	X	X	X
BBB	Rubber Tire Manufacturing Industry	X	X	X	
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X		
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006				

HHH	Synthetic Fiber Production Facilities	X	X	X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X	X		
JJJ	Petroleum Dry Cleaners	X	X	X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	X	
LLL	Onshore Natural Gas Processing: SO2 Emissions	X	X	X	
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X		
OOO	Nonmetallic Mineral Processing Plants	X	X	X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X	X	X	
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X	X	X	
SSS	Magnetic Tape Coating Facilities	X	X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	
UUU	Calciners and Dryers in Mineral Industries	X	X	X	X
VVV	Polymeric Coating of Supporting Substrates Facilities	X	X	X	X
WWW	Municipal Solid Waste Landfills	X	X	X	X
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999, or for Which Modification or Reconstruction is Commenced After June 6, 2001	X			
CCCC	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	X			
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	X			
GGGG	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines				

JJJJ	Stationary Spark Ignition Internal Combustion Engines				
KKKK	Stationary Combustion Turbines				

(viii) Delegations for Shasta County Air Quality Management District, Siskiyou County Air Pollution Control District, South Coast Air Quality Management District, and Tehama County Air Pollution Control District are shown in the following table:

Delegation Status for New Source Performance Standards for Shasta County Air Quality Management District, Siskiyou County Air Pollution Control District, South Coast Air Quality Management District, and Tehama County Air Pollution Control District

		Air Pollution Control Agency			
	Subpart	**Shasta County AQMD**	**Siskiyou County APCD**	**South Coast AQMD**	**Tehama County APCD**
A	General Provisions	X	X	X	
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X		X	
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978			X	
Db	Industrial-Commercial-Institutional Steam Generating Units			X	
Dc	Small Industrial Steam Generating Units			X	
E	Incinerators	X		X	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994			X	
Eb	Municipal Waste Combustors Constructed After September 20, 1994			X	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996			X	
F	Portland Cement Plants	X		X	
G	Nitric Acid Plants	X		X	
H	Sulfuric Acid Plants	X		X	
I	Hot Mix Asphalt Facilities	X		X	
J	Petroleum Refineries	X		X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007				
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X		X	
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984			X	

Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984			X	
L	Secondary Lead Smelters	X		X	
M	Secondary Brass and Bronze Production Plants	X		X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X		X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983			X	
O	Sewage Treatment Plants	X		X	
P	Primary Copper Smelters	X		X	
Q	Primary Zinc Smelters	X		X	
R	Primary Lead Smelters	X		X	
S	Primary Aluminum Reduction Plants	X		X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X		X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X		X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X		X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X		X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X		X	
Y	Coal Preparation Plants	X		X	
Z	Ferroalloy Production Facilities	X		X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X		X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983			X	
BB	Kraft pulp Mills	X		X	
CC	Glass Manufacturing Plants			X	
DD	Grain Elevators	X		X	
EE	Surface Coating of Metal Furniture			X	
FF	(Reserved)				
GG	Stationary Gas Turbines			X	
HH	Lime Manufacturing Plants	X		X	

KK	Lead-Acid Battery Manufacturing Plants			X	
LL	Metallic Mineral Processing Plants			X	
MM	Automobile and Light Duty Trucks Surface Coating Operations			X	
NN	Phosphate Rock Plants			X	
PP	Ammonium Sulfate Manufacture			X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing			X	
RR	Pressure Sensitive Tape and Label Surface Coating Operations			X	
SS	Industrial Surface Coating: Large Appliances			X	
TT	Metal Coil Surface Coating			X	
UU	Asphalt Processing and Asphalt Roofing Manufacture			X	
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry			X	
VVa	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006				
WW	Beverage Can Surface Coating Industry			X	
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters		X	X	
BBB	Rubber Tire Manufacturing Industry		X	X	
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry			X	
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing			X	
GGG	Equipment Leaks of VOC in Petroleum Refineries			X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006				
HHH	Synthetic Fiber Production Facilities			X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes			X	
JJJ	Petroleum Dry Cleaners			X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants			X	

LLL	Onshore Natural Gas Processing: SO2 Emissions			X	
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations			X	
OOO	Nonmetallic Mineral Processing Plants			X	
PPP	Wool Fiberglass Insulation Manufacturing Plants			X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems		X	X	
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes			X	
SSS	Magnetic Tape Coating Facilities		X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		X	X	
UUU	Calciners and Dryers in Mineral Industries			X	
VVV	Polymeric Coating of Supporting Substrates Facilities			X	
WWW	Municipal Solid Waste Landfills			X	
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commended After June 6, 2001	X	X	X	
CCCC	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			X	
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006			X	
GGGG	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines			X	
JJJJ	Stationary Spark Ignition Internal Combustion Engines				
KKKK	Stationary Combustion Turbines			X	

(ix) Delegations for Tuolumne County Air Pollution Control District, Ventura County Air Pollution Control District, and Yolo-Solano Air Quality Management District are shown in the following table:

Delegation Status for New Source Performance Standards for Tuolumne County Air Pollution Control District, Ventura County Air Pollution Control District, and Yolo-Solano Air Quality Management District

		Air Pollution Control Agency		
	Subpart	Tuolumne County APCD	Ventura County APCD	Yolo-Solano AQMD
A	General Provisions	X	X	
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X		
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	
Dc	Small Industrial Steam Generating Units	X		
E	Incinerators	X		
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X		
Eb	Municipal Waste Combustors Constructed After September 20, 1994	X		
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X		
F	Portland Cement Plants	X		
G	Nitric Acid Plants	X		
H	Sulfuric Acid Plants	X		
I	Hot Mix Asphalt Facilities	X	X	
J	Petroleum Refineries	X	X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007			
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X		
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X		
L	Secondary Lead Smelters	X		
M	Secondary Brass and Bronze Production Plants	X		
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X		

Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X		
O	Sewage Treatment Plants	X		
P	Primary Copper Smelters	X		
Q	Primary Zinc Smelters	X		
R	Primary Lead Smelters	X		
S	Primary Aluminum Reduction Plants	X		
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X		
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X		
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X		
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X		
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X		
Y	Coal Preparation Plants	X		
Z	Ferroalloy Production Facilities	X		
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X		
BB	Kraft pulp Mills	X		
CC	Glass Manufacturing Plants	X		
DD	Grain Elevators	X		
EE	Surface Coating of Metal Furniture	X		
FF	(Reserved)			
GG	Stationary Gas Turbines	X		
HH	Lime Manufacturing Plants	X		
KK	Lead-Acid Battery Manufacturing Plants	X		
LL	Metallic Mineral Processing Plants	X		
MM	Automobile and Light Duty Trucks Surface Coating Operations	X		
NN	Phosphate Rock Plants	X		
PP	Ammonium Sulfate Manufacture	X		
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X		
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X		
SS	Industrial Surface Coating: Large Appliances	X		

TT	Metal Coil Surface Coating	X		
UU	Asphalt Processing and Asphalt Roofing Manufacture	X		
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X		
VVa	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006			
WW	Beverage Can Surface Coating Industry	X		
XX	Bulk Gasoline Terminals			
AAA	New Residential Wood Heaters	X		
BBB	Rubber Tire Manufacturing Industry	X		
CCC	(Reserved)			
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X		
EEE	(Reserved)			
FFF	Flexible Vinyl and Urethane Coating and Printing	X		
GGG	Equipment Leaks of VOC in Petroleum Refineries	X		
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006			
HHH	Synthetic Fiber Production Facilities	X		
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X		
JJJ	Petroleum Dry Cleaners	X		
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X		
LLL	Onshore Natural Gas Processing: SO2 Emissions	X		
MMM	(Reserved)			
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X		
OOO	Nonmetallic Mineral Processing Plants	X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants	X		
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X		
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X		
SSS	Magnetic Tape Coating Facilities	X		

TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X		
UUU	Calciners and Dryers in Mineral Industries	X		
VVV	Polymeric Coating of Supporting Substrates Facilities	X		
WWW	Municipal Solid Waste Landfills	X	X	
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	X		
CCCC	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	X		
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006			
GGGG	(Reserved)			
IIII	Stationary Compression Ignition Internal Combustion Engines			
JJJJ	Stationary Spark Ignition Internal Combustion Engines			
KKKK	Stationary Combustion Turbines			

(3) *Hawaii.* The following table identifies delegations for Hawaii:
Delegation Status for New Source Performance Standards for Hawaii:

Delegation Status for New Source Performance Standards for Hawaii

	Subpart	**Hawaii**
A	General Provisions	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X
Dc	Small Industrial Steam Generating Units	X
E	Incinerators	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X
Eb	Municipal Waste Combustors Constructed After September 20, 1994	X
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X
F	Portland Cement Plants	X
G	Nitric Acid Plants	
H	Sulfuric Acid Plants	
I	Hot Mix Asphalt Facilities	X

J	Petroleum Refineries	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007	
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X
L	Secondary Lead Smelters	
M	Secondary Brass and Bronze Production Plants	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	
O	Sewage Treatment Plants	X
P	Primary Copper Smelters	
Q	Primary Zinc Smelters	
R	Primary Lead Smelters	
S	Primary Aluminum Reduction Plants	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	
Y	Coal Preparation Plants	X
Z	Ferroalloy Production Facilities	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X
BB	Kraft pulp Mills	
CC	Glass Manufacturing Plants	
DD	Grain Elevators	
EE	Surface Coating of Metal Furniture	
FF	(Reserved)	

GG	Stationary Gas Turbines	X
HH	Lime Manufacturing Plants	
KK	Lead-Acid Battery Manufacturing Plants	
LL	Metallic Mineral Processing Plants	
MM	Automobile and Light Duty Trucks Surface Coating Operations	
NN	Phosphate Rock Plants	
PP	Ammonium Sulfate Manufacture	
QQ	Graphic Arts Industry: Publication Rotogravure Printing	
RR	Pressure Sensitive Tape and Label Surface Coating Operations	
SS	Industrial Surface Coating: Large Appliances	
TT	Metal Coil Surface Coating	
UU	Asphalt Processing and Asphalt Roofing Manufacture	
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	
WW	Beverage Can Surface Coating Industry	X
XX	Bulk Gasoline Terminals	X
AAA	New Residential Wool Heaters	
BBB	Rubber Tire Manufacturing Industry	
CCC	(Reserved)	
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	
EEE	(Reserved)	
FFF	Flexible Vinyl and Urethane Coating and Printing	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	
HHH	Synthetic Fiber Production Facilities	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	
JJJ	Petroleum Dry Cleaners	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	
LLL	Onshore Natural Gas Processing: SO2 Emissions	
MMM	(Reserved)	
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing	X

	Industry (SOCMI) Distillation Operations	
OOO	Nonmetallic Mineral Processing Plants	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	
QQQ	VOC Emissions From Petroleum Refinery Wastewater	X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	
SSS	Magnetic Tape Coating Facilities	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	
UUU	Calciners and Dryers in Mineral Industries	X
VVV	Polymeric Coating of Supporting Substrates Facilities	X
WWW	Municipal Solid Waste Landfills	X
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	X
CCCC	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	X
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	
GGGG	(Reserved)	
IIII	Stationary Compression Ignition Internal Combustion Engines	
JJJJ	Stationary Spark Ignition Internal Combustion Engines	
KKKK	Stationary Combustion Turbines	

(4) *Nevada.* The following table identifies delegations for Nevada:

Delegation Status for New Source Performance Standards for Nevada

		Air Pollution Control Agency		
	Subpart	**Nevada DEP**	**Clark County**	**Washoe County**
A	General Provisions	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X		
Db	Industrial-Commercial-Institutional Steam Generating Units	X		
Dc	Small Industrial Steam Generating Units	X		
E	Incinerators	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X		

Eb	Municipal Waste Combustors Constructed After September 20, 1994	X		
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X		
F	Portland Cement Plants	X	X	X
G	Nitric Acid Plants	X	X	
H	Sulfuric Acid Plants	X	X	
I	Hot Mix Asphalt Facilities	X	X	X
J	Petroleum Refineries	X	X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007			
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X		
L	Secondary Lead Smelters	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X		
O	Sewage Treatment Plants	X	X	X
P	Primary Copper Smelters	X	X	X
Q	Primary Zinc Smelters	X	X	X
R	Primary Lead Smelters	X	X	X
S	Primary Aluminum Reduction Plants	X	X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	
Y	Coal Preparation Plants	X	X	X

Z	Ferroalloy Production Facilities	X	X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X		
BB	Kraft pulp Mills	X	X	
CC	Glass Manufacturing Plants	X	X	
DD	Grain Elevators	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X
FF	(Reserved)			
GG	Stationary Gas Turbines	X	X	X
HH	Lime Manufacturing Plants	X	X	X
KK	Lead-Acid Battery Manufacturing Plants	X	X	X
LL	Metallic Mineral Processing Plants	X	X	X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X
NN	Phosphate Rock Plants	X	X	X
PP	Ammonium Sulfate Manufacture	X	X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	
SS	Industrial Surface Coating: Large Appliances	X	X	X
TT	Metal Coil Surface Coating	X	X	X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X	X	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006			
WW	Beverage Can Surface Coating Industry	X	X	
XX	Bulk Gasoline Terminals	X	X	
AAA	New Residential Wool Heaters			
BBB	Rubber Tire Manufacturing Industry	X		
CCC	(Reserved)			
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X		
EEE	(Reserved)			

FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006			
HHH	Synthetic Fiber Production Facilities	X	X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X		
JJJ	Petroleum Dry Cleaners	X	X	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X		
LLL	Onshore Natural Gas Processing: SO2 Emissions	X		
MMM	(Reserved)			
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X		
OOO	Nonmetallic Mineral Processing Plants	X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X		
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X		
SSS	Magnetic Tape Coating Facilities	X		
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X		
UUU	Calciners and Dryers in Mineral Industries	X		
VVV	Polymeric Coating of Supporting Substrates Facilities	X		
WWW	Municipal Solid Waste Landfills	X		
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commended After June 6, 2001	X		
CCCC	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	X		
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	X		
GGGG	(Reserved)			
IIII	Stationary Compression Ignition Internal Combustion Engines	X		
JJJJ	Stationary Spark Ignition Internal Combustion Engines	X		
KKKK	Stationary Combustion Turbines	X		

(5) *Guam.* The following table identifies delegations as of June 15, 2001:

Delegation Status for New Source Performance Standards for Guam

	Subpart	Guam
A	General Provisions	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	
Db	Industrial-Commercial-Institutional Steam Generating Units	
Dc	Small Industrial Steam Generating Units	
E	Incinerators	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	
Eb	Municipal Waste Combustors Constructed After September 20, 1994	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	
F	Portland Cement Plants	X
G	Nitric Acid Plants	
H	Sulfuric Acid Plants	
I	Hot Mix Asphalt Facilities	X
J	Petroleum Refineries	X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X

(e) The following lists the specific part 60 standards that have been delegated unchanged to the air pollution control agencies in Region 6.
(1) *New Mexico.* The New Mexico Environment Department has been delegated all part 60 standards promulgated by EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters, as amended in theFederal Registerthrough September 1, 2002.
(2) Louisiana. The Louisiana Department of Environmental Quality has been delegated all part 60 standards promulgated by EPA, except subpart AAA—Standards for Performance for New Residential Wood Heaters, as amended in theFederal Registerthrough July 1, 2008.

Delegation Status for Part 60 Standards—State of Louisiana

Subpart	Source category	LDEQ[1]
A	General Provisions	Yes.

D	Fossil Fueled Steam Generators (>250 MM BTU/hr). Including amendments issued January 28, 2009. (74 FR 5072)	Yes.
Da	Electric Utility Steam Generating Units (>250 MM BTU/hr). Including amendments issued January 28, 2009. (74 FR 5072)	Yes.
Db	Industrial-Commercial-Institutional Steam Generating Units (100 to 250 MM BTU/hr). Including amendments issued January 28, 2009. (74 FR 5072)	Yes.
Dc	Industrial-Commercial-Institutional Small Steam Generating Units (10 to 100 MM BTU/hr). Including amendments issued January 28, 2009. (74 FR 5072)	Yes.
E	Incinerators (>50 tons per day). Including amendments issued January 28, 2009. (74 FR 5072)	Yes.
Ea	Municipal Waste Combustors	Yes.
Eb	Large Municipal Waste Combustors	Yes.
Ec	Hospital/Medical/Infectious Waste Incinerators	Yes.
F	Portland Cement Plants	Yes.
G	Nitric Acid Plants	Yes.
H	Sulfuric Acid Plants	Yes.
I	Hot Mix Asphalt Facilities	Yes.
J	Petroleum Refineries	Yes.
Ja	Petroleum Refineries (After May 14, 2007). Including amendments issued July 28, 2008. (73 FR 43626)	Yes.
K	Storage Vessels for Petroleum Liquids (After 6/11/73 & Before 5/19/78)	Yes.
Ka	Storage Vessels for Petroleum Liquids (After 6/11/73 & Before 5/19/78)	Yes.
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Stg/Vessels) After 7/23/84	Yes.
L	Secondary Lead Smelters	Yes.
M	Secondary Brass and Bronze Production Plants	Yes.
N	Primary Emissions from Basic Oxygen Process Furnaces (Construction Commenced After June 11, 1973)	Yes.
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities Construction is Commenced After January 20, 1983	Yes.
O	Sewage Treatment Plants	Yes.
P	Primary Copper Smelters	Yes.
Q	Primary Zinc Smelters	Yes.
R	Primary Lead Smelters	Yes.
S	Primary Aluminum Reduction Plants	Yes.
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Plants	Yes.
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	Yes.
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	Yes.

W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	Yes.
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	Yes.
Y	Coal Preparation Plants	Yes.
Z	Ferroalloy Production Facilities	Yes.
AA	Steel Plants: Electric Arc Furnaces After 10/21/74 & On or Before 8/17/83	Yes.
AAa	Steel Plants: Electric Arc Furnaces & Argon-Oxygen Decarburization Vessels After 8/07/83	Yes.
BB	Kraft Pulp Mills	Yes.
CC	Glass Manufacturing Plants	Yes.
DD	Grain Elevators	Yes.
EE	Surface Coating of Metal Furnature	Yes.
GG	Stationary Gas Turbines	Yes.
HH	Lime Manufacturing Plants	Yes.
KK	Lead-Acid Battery Manufacturing Plants	Yes.
LL	Metallic Mineral Processing Plants	Yes.
MM	Automobile & Light Duty Truck Surface Coating Operations	Yes.
NN	Phosphate Manufacturing Plants	Yes.
PP	Ammonium Sulfate Manufacture	Yes.
QQ	Graphic Arts Industry: Publication Rotogravure Printing	Yes.
RR	Pressure Sensitive Tape and Label Surface Coating Operations	Yes.
SS	Industrial Surface Coating: Large Appliances	Yes.
TT	Metal Coil Surface Coating	Yes.
UU	Asphalt Processing and Asphalt Roofing Manufacture	Yes.
VV	VOC Equipment Leaks in the SOCMI Industry	Yes.
VVa	VOC Equipment Leaks in the SOCMI Industry (After November 7, 2006)	Yes.
XX	Bulk Gasoline Terminals	Yes.
AAA	New Residential Wood Heaters	No
BBB	Rubber Tire Manufacturing Industry	Yes.
DDD	Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry	Yes.
FFF	Flexible Vinyl and Urethane Coating and Printing	Yes.
GGG	VOC Equipment Leaks in Petroleum Refineries	Yes.
HHH	Synthetic Fiber Production	Yes.
III	VOC Emissions from the SOCMI Air Oxidation Unit Processes	Yes.
JJJ	Petroleum Dry Cleaners	Yes.

KKK	VOC Equipment Leaks From Onshore Natural Gas Processing Plants	Yes.
LLL	Onshore Natural Gas Processing: SO2 Emissions	Yes.
NNN	VOC Emissions from SOCMI Distillation Operations	Yes.
OOO	Nonmetallic Mineral Processing Plants	Yes.
PPP	Wool Fiberglass Insulation Manufacturing Plants	Yes.
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	Yes.
RRR	VOC Emissions from SOCMI Reactor Processes	Yes.
SSS	Magnetic Tape Coating Operations	Yes.
TTT	Industrial Surface Coating: Plastic Parts for Business Machines	Yes.
UUU	Calciners and Dryers in Mineral Industries	Yes.
VVV	Polymeric Coating of Supporting Substrates Facilities	Yes.
WWW	Municipal Solid Waste Landfills	Yes.
AAAA	Small Municipal Waste Combustion Units (Construction is Commenced After 8/30/99 or Modification/Reconstruction is Commenced After 6/06/2001)	Yes.
CCCC	Commercial & Industrial Solid Waste Incineration Units (Construction is Commenced After 11/30/1999 or Modification/Reconstruction is Commenced on or After 6/01/2001)	Yes.
EEEE	Other Solid Waste Incineration Units (Constructed after 12/09/2004 or Modicatation/Reconstruction is commenced on or after 06/16/2004)	Yes.
IIII	Stationary Compression Ignition Internal Combustion Engines	Yes.
JJJJ	Stationary Spark Ignition Internal Combustion Engines. Including amendments issued October 8, 2008. (73 FR 59175)	Yes.
KKKK	Stationary Combustion Turbines (Construction Commenced After 02/18/2005)	Yes

[1]The Louisiana Department of Environmental Quality (LDEQ) has been delegated all Part 60 standards promulgated by EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters—as amended in the Federal Register through July 1, 2008.
(3) *Albuquerque-Bernalillo County Air Quality Control Board.* The Albuquerque-Bernalillo County Air Quality Control Board has been delegated all part 60 standards promulgated by EPA, except Subpart AAA—Standards of Performance for New Residential Wood Heaters; Subpart WWW—Standards of Performance for Municipal Solid Waste Landfills; Subpart Cc—Emissions Guidelines and Compliance Times for Municipal Solid Waste Landfills, as amended in theFederal Registerthrough July 1, 2004.
[40 FR 18169, Apr. 25, 1975]

Editorial Note: ForFederal Registercitations affecting §60.4 see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov* .

§ 60.5 Determination of construction or modification.

(a) When requested to do so by an owner or operator, the Administrator will make a determination of whether action taken or intended to be taken by such owner or operator constitutes construction (including reconstruction) or modification or the commencement thereof within the meaning of this part.
(b) The Administrator will respond to any request for a determination under paragraph (a) of this section within 30 days of receipt of such request.

[40 FR 58418, Dec. 16, 1975]

§ 60.6 Review of plans.

(a) When requested to do so by an owner or operator, the Administrator will review plans for construction or modification for the purpose of providing technical advice to the owner or operator.
(b)(1) A separate request shall be submitted for each construction or modification project.
(2) Each request shall identify the location of such project, and be accompanied by technical information describing the proposed nature, size, design, and method of operation of each affected facility involved in such project, including information on any equipment to be used for measurement or control of emissions.
(c) Neither a request for plans review nor advice furnished by the Administrator in response to such request shall (1) relieve an owner or operator of legal responsibility for compliance with any provision of this part or of any applicable State or local requirement, or (2) prevent the Administrator from implementing or enforcing any provision of this part or taking any other action authorized by the Act.
[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974]

§ 60.7 Notification and record keeping.

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:
(1) A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
(2) [Reserved]
(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with §60.13(c). Notification shall be postmarked not less than 30 days prior to such date.
(6) A notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by §60.8 in lieu of Method 9 observation data as allowed by §60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.
(b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
(c) Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:
(1) The magnitude of excess emissions computed in accordance with §60.13(h), any conversion factor(s) used,

and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
(d) The summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in §60.7(c) need not be submitted unless requested by the Administrator.
(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in §60.7(c) shall both be submitted.
Figure 1—Summary Report—Gaseous and Opacity Excess Emission and Monitoring System Performance
Pollutant (Circle One—SO_2/NO_X/TRS/H_2S/CO/Opacity)
Reporting period dates: From _____ to _____
Company:
Emission Limitation____________________
Address:
Monitor Manufacturer and Model No.____________________
Date of Latest CMS Certification or Audit____________________
Process Unit(s) Description:
Total source operating time in reporting period[1] ____________________

Emission data summary[1]		**CMS performance summary**[1]	
1. Duration of excess emissions in reporting period due to:		1. CMS downtime in reporting period due to:	
a. Startup/shutdown		a. Monitor equipment malfunctions	
b. Control equipment problems		b. Non-Monitor equipment malfunctions	
c. Process problems		c. Quality assurance calibration	
d. Other known causes		d. Other known causes	
e. Unknown causes		e. Unknown causes	
2. Total duration of excess emission		2. Total CMS Downtime	
3. Total duration of excess emissions × (100) [Total source operating time]	%[2]	3. [Total CMS Downtime] × (100) [Total source operating time]	%[2]

[1]For opacity, record all times in minutes. For gases, record all times in hours.
[2]For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.
On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

____
Name
____

Signature

____
Title

____
Date

(e)(1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the applicable standard; and

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.

(f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

(1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.
(g) If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.
(h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.
[36 FR 24877, Dec. 28, 1971, as amended at 40 FR 46254, Oct. 6, 1975; 40 FR 58418, Dec. 16, 1975; 45 FR 5617, Jan. 23, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 52 FR 9781, Mar. 26, 1987; 55 FR 51382, Dec. 13, 1990; 59 FR 12428, Mar. 16, 1994; 59 FR 47265, Sep. 15, 1994; 64 FR 7463, Feb. 12, 1999]

§ 60.8 Performance tests.

(a) Except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of this section, within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).
(1) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.
(2) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.
(3) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.
(4) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(1), (2), and (3) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.
(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.
(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of

any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.
(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
(2) Safe sampling platform(s).
(3) Safe access to sampling platform(s).
(4) Utilities for sampling and testing equipment.
(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.
(g) The performance testing shall include a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. Gaseous audit samples are designed to audit the performance of the sampling system as well as the analytical system and must be collected by the sampling system during the compliance test just as the compliance samples are collected. If a liquid or solid audit sample is designed to audit the sampling system, it must also be collected by the sampling system during the compliance test. If multiple sampling systems or sampling trains are used during the compliance test for any of the test methods, the tester is only required to use one of the sampling systems per method to collect the audit sample. The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system and at the same time as the compliance samples. Retests are required when there is a failure to produce acceptable results for an audit sample. However, if the audit results do not affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. Acceptance of the test results shall constitute a waiver of the reanalysis requirement, further audits, or retests. The compliance authority may also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample. For pollutants that exist in the gas phase at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in air or nitrogen that can be introduced into the sampling system of the test method at or near the same entry point as a sample from the emission source. If no gas phase audit samples are available, an acceptable alternative is a sample of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. For samples that exist only in a liquid or solid form at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. An accredited audit sample provider (AASP) is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.
(1) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. No audit samples are required for the following test methods: Methods 3C of Appendix A–3 of Part 60, Methods 6C, 7E, 9, and 10 of Appendix A–4 of Part 60, Method 18 of Appendix A–6 of Part 60, Methods 20, 22, and 25A of Appendix A–7 of Part 60, and Methods 303, 318, 320, and 321 of Appendix A of Part 63. If multiple sources at a

single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test. The compliance authority responsible for the compliance test may waive the requirement to include an audit sample if they believe that an audit sample is not necessary. “Commercially available” means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, *http://www.epa.gov/ttn/emc,* to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test. When ordering an audit sample, the source, operator, or representative shall give the sample provider an estimate for the concentration of each pollutant that is emitted by the source or the estimated concentration of each pollutant based on the permitted level and the name, address, and phone number of the compliance authority. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the AASP. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The tester may request and the compliance authority may grant a waiver to the requirement that a representative of the compliance authority must be present at the testing site during the field analysis of an audit sample. The source owner, operator, or representative may report the results of the audit sample to the compliance authority and report the results of the audit sample to the AASP prior to collecting any emission samples. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.
(2) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:
(i) Preparing the sample;
(ii) Confirming the true concentration of the sample;
(iii) Defining the acceptance limits for the results from a well qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range.
(iv) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;
(v) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;
(vi) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;
(vii) The AASP shall report the results from each audit sample in a timely manner to the compliance authority and then to the source owner, operator, or representative. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.
(viii) Evaluating the acceptance limits of samples at least once every two years to determine in cooperation with the voluntary consensus standard body if they should be changed;
(ix) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the

audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.
(3) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria document that describes how audit samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:
(i) Checking audit samples to confirm their true value as reported by the AASP;
(ii) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years;
(iii) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.
(4) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). The VCSB shall operate in accordance with the procedures and requirements in the Office of Management and Budget Circular A–119. A copy of Circular A–119 is available upon request by writing the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, by calling (202) 395–6880 or downloading online at *http://standards.gov/standards_gov/a119.cfm.* The VCSB shall approve all accrediting bodies. The Administrator will review all technical criteria documents. If the technical criteria documents do not meet the minimum technical requirements in paragraphs (g)(2) through (4)of this section, the technical criteria documents are not acceptable and the proposed audit sample program is not capable of producing audit samples of sufficient quality to be used in a compliance test. All acceptable technical criteria documents shall be posted on the EPA Web site at the following URL, *http://www.epa.gov/ttn/emc.*
[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974; 42 FR 57126, Nov. 1, 1977; 44 FR 33612, June 11, 1979; 54 FR 6662, Feb. 14, 1989; 54 FR 21344, May 17, 1989; 64 FR 7463, Feb. 12, 1999; 72 FR 27442, May 16, 2007; 75 FR 55646, Sept. 13, 2010]

§ 60.9 Availability of information.

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter. (Information submitted voluntarily to the Administrator for the purposes of §§60.5 and 60.6 is governed by §§2.201 through 2.213 of this chapter and not by §2.301 of this chapter.)

§ 60.10 State authority.

The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from:
(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.
(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.

§ 60.11 Compliance with standards and maintenance requirements.

(a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by §60.8, unless otherwise specified in the applicable standard.
(b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a

manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating 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, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(e)(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in §60.8 unless one of the following conditions apply. If no performance test under §60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under §60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in §60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under §60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determing compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in paragraph (e)(5) of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of this part, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.
(2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under §60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.
(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in §60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.
(4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by §60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and §60.8 performance test results.
(5) An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under §60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under §60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under §60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under §60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under §60.8. The owner or operator of an affected facility using a COMS for compliance purposes is

responsible for demonstrating that the COMS meets the requirements specified in §60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard.
(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by §60.8, the opacity observation results and observer certification required by §60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by §60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with §60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.
(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.
(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in theFederal Register.
(f) Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.
(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[38 FR 28565, Oct. 15, 1973, as amended at 39 FR 39873, Nov. 12, 1974; 43 FR 8800, Mar. 3, 1978; 45 FR 23379, Apr. 4, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 51 FR 1790, Jan. 15, 1986; 52 FR 9781, Mar. 26, 1987; 62 FR 8328, Feb. 24, 1997; 65 FR 61749, Oct. 17, 2000]

§ 60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[39 FR 9314, Mar. 8, 1974]

§ 60.13 Monitoring requirements.

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.
(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under §60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.
(c) If the owner or operator of an affected facility elects to submit continous opacity monitoring system (COMS)

data for compliance with the opacity standard as provided under §60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under §60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under §60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.
(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under §60.8 and as described in §60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of this section at least 10 days before the performance test required under §60.8 is conducted.
(2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.
(d)(1) Owners and operators of a CEMS installed in accordance with the provisions of this part, must check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of this part, must automatically, intrinsic to the opacity monitor, check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of PS–1 in appendix B of this part. For a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
(2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.
(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
(1) All continuous monitoring systems referenced by paragraph (c) of this section for measuring opacity of emissions shall 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.
(2) All continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of this part shall be used.
(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple

breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.
(h)(1) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in §60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.
(2) For continuous monitoring systems other than opacity, 1-hour averages shall be computed as follows, except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations:
(i) Except as provided under paragraph (h)(2)(iii) of this section, for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, *i.e.* , one data point in each of the 15-minute quadrants of the hour.
(ii) Except as provided under paragraph (h)(2)(iii) of this section, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.
(iii) For any operating hour in which required maintenance or quality-assurance activities are performed:
(A) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or
(B) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.
(iv) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of paragraph (h)(2)(iii) of this section are met, based solely on valid data recorded after the successful calibration.
(v) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.
(vi) Except as provided under paragraph (h)(2)(vii) of this section, data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.
(vii) Owners and operators complying with the requirements of §60.7(f)(1) or (2) must include any data recorded during periods of monitor breakdown or malfunction in the data averages.
(viii) When specified in an applicable subpart, hourly averages for certain partial operating hours shall not be computed or included in the emission averages (*e.g.* hours with < 30 minutes of unit operation under §60.47b(d)).
(ix) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (*e.g.* , ppm pollutant and percent O_2or ng/J of pollutant).
(3) All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.
(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:
(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.
(2) Alternative monitoring requirements when the affected facility is infrequently operated.
(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.
(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.
(5) Alternative methods of converting pollutant concentration measurements to units of the standards.
(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.
(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.
(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in

Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.
(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.
(j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:
(1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in Section 8.4 of Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in §60.8 of this subpart or other tests performed following the criteria in §60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).
(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., §60.45(g) (2) and (3), §60.73(e), and §60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in Section 8.4 of Performance Specification 2.
[40 FR 46255, Oct. 6, 1975; 40 FR 59205, Dec. 22, 1975, as amended at 41 FR 35185, Aug. 20, 1976; 48 FR 13326, Mar. 30, 1983; 48 FR 23610, May 25, 1983; 48 FR 32986, July 20, 1983; 52 FR 9782, Mar. 26, 1987; 52 FR 17555, May 11, 1987; 52 FR 21007, June 4, 1987; 64 FR 7463, Feb. 12, 1999; 65 FR 48920, Aug. 10, 2000; 65 FR 61749, Oct. 17, 2000; 66 FR 44980, Aug. 27, 2001; 71 FR 31102, June 1, 2006; 72 FR 32714, June 13, 2007]

Editorial Note: At 65 FR 61749, Oct. 17, 2000, §60.13 was amended by revising the words "ng/J of pollutant" to read "ng of pollutant per J of heat input" in the sixth sentence of paragraph (h). However, the amendment could not be incorporated because the words "ng/J of pollutant" do not exist in the sixth sentence of paragraph (h).

§ 60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.
(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a

standard is applicable. The Administrator shall use the following to determine emission rate:
(1) Emission factors as specified in the latest issue of “Compilation of Air Pollutant Emission Factors,” EPA Publication No. AP–42, or other emission factors determined by the Administrator to be superior to AP–42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.
(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.
(d) [Reserved]
(e) The following shall not, by themselves, be considered modifications under this part:
(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and §60.15.
(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
(3) An increase in the hours of operation.
(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by §60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
(6) The relocation or change in ownership of an existing facility.
(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.
(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.
(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.
(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.
(j)(1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.
(2) This exemption shall not apply to any new unit that:

(i) Is designated as a replacement for an existing unit;
(ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and
(iii) Is located at a different site than the existing unit.
(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A *temporary clean coal control technology demonstration project,* for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.
[40 FR 58419, Dec. 16, 1975, as amended at 43 FR 34347, Aug. 3, 1978; 45 FR 5617, Jan. 23, 1980; 57 FR 32339, July 21, 1992; 65 FR 61750, Oct. 17, 2000]

§ 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.
(b) “Reconstruction” means the replacement of components of an existing facility to such an extent that:
(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.
(c) “Fixed capital cost” means the capital needed to provide all the depreciable components.
(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:
(1) Name and address of the owner or operator.
(2) The location of the existing facility.
(3) A brief description of the existing facility and the components which are to be replaced.
(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.
(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.
(6) The estimated life of the existing facility after the replacements.
(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.
(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.
(f) The Administrator's determination under paragraph (e) shall be based on:
(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;
(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and
(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.
(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.
[40 FR 58420, Dec. 16, 1975]

§ 60.16 Priority list.

Prioritized Major Source Categories

Priority Number [1]	*Source Category*
1.	Synthetic Organic Chemical Manufacturing Industry (SOCMI) and Volatile Organic Liquid Storage Vessels and Handling Equipment
	(a) SOCMI unit processes
	(b) Volatile organic liquid (VOL) storage vessels and handling equipment
	(c) SOCMI fugitive sources
	(d) SOCMI secondary sources
2.	Industrial Surface Coating: Cans
3.	Petroleum Refineries: Fugitive Sources
4.	Industrial Surface Coating: Paper
5.	Dry Cleaning
	(a) Perchloroethylene
	(b) Petroleum solvent
6.	Graphic Arts
7.	Polymers and Resins: Acrylic Resins
8.	Mineral Wool (Deleted)
9.	Stationary Internal Combustion Engines
10.	Industrial Surface Coating: Fabric
11.	Industrial-Commercial-Institutional Steam Generating Units.
12.	Incineration: Non-Municipal (Deleted)
13.	Non-Metallic Mineral Processing
14.	Metallic Mineral Processing
15.	Secondary Copper (Deleted)
16.	Phosphate Rock Preparation
17.	Foundries: Steel and Gray Iron
18.	Polymers and Resins: Polyethylene
19.	Charcoal Production
20.	Synthetic Rubber
	(a) Tire manufacture
	(b) SBR production

21.	Vegetable Oil
22.	Industrial Surface Coating: Metal Coil
23.	Petroleum Transportation and Marketing
24.	By-Product Coke Ovens
25.	Synthetic Fibers
26.	Plywood Manufacture
27.	Industrial Surface Coating: Automobiles
28.	Industrial Surface Coating: Large Appliances
29.	Crude Oil and Natural Gas Production
30.	Secondary Aluminum
31.	Potash (Deleted)
32.	Lightweight Aggregate Industry: Clay, Shale, and Slate[2]
33.	Glass
34.	Gypsum
35.	Sodium Carbonate
36.	Secondary Zinc (Deleted)
37.	Polymers and Resins: Phenolic
38.	Polymers and Resins: Urea-Melamine
39.	Ammonia (Deleted)
40.	Polymers and Resins: Polystyrene
41.	Polymers and Resins: ABS-SAN Resins
42.	Fiberglass
43.	Polymers and Resins: Polypropylene
44.	Textile Processing
45.	Asphalt Processing and Asphalt Roofing Manufacture
46.	Brick and Related Clay Products
47.	Ceramic Clay Manufacturing (Deleted)
48.	Ammonium Nitrate Fertilizer
49.	Castable Refractories (Deleted)
50.	Borax and Boric Acid (Deleted)
51.	Polymers and Resins: Polyester Resins
52.	Ammonium Sulfate
53.	Starch

54.	Perlite
55.	Phosphoric Acid: Thermal Process (Deleted)
56.	Uranium Refining
57.	Animal Feed Defluorination (Deleted)
58.	Urea (for fertilizer and polymers)
59.	Detergent (Deleted)
Other Source Categories	
Lead acid battery manufacture[3]	
Organic solvent cleaning[3]	
Industrial surface coating: metal furniture[3]	
Stationary gas turbines[4]	
Municipal solid waste landfills[4]	

[1]Low numbers have highest priority, e.g., No. 1 is high priority, No. 59 is low priority.
[2]Formerly titled “Sintering: Clay and Fly Ash”.
[3]Minor source category, but included on list since an NSPS is being developed for that source category.
[4]Not prioritized, since an NSPS for this major source category has already been promulgated.
[47 FR 951, Jan. 8, 1982, as amended at 47 FR 31876, July 23, 1982; 51 FR 42796, Nov. 25, 1986; 52 FR 11428, Apr. 8, 1987; 61 FR 9919, Mar. 12, 1996]

§ 60.17 Incorporations by reference.

Link to an amendment published at 76 FR 15450, Mar. 21, 2011.
This amendment was delayed indefinitely at 76 FR 28662, May 18, 2011.
Link to an amendment published at 77 FR 9446, Feb. 16, 2012.

The materials listed below are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register on the date listed. These materials are incorporated as they exist on the date of the approval, and a notice of any change in these materials will be published in theFederal Register.The materials are available for purchase at the corresponding address noted below, and all are available for inspection at the Library (C267–01), U.S. EPA, Research Triangle Park, NC or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*
(a) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959; or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106.
(1) ASTM A99–76, 82 (Reapproved 1987), Standard Specification for Ferromanganese, incorporation by reference (IBR) approved for §60.261.
(2) ASTM A100–69, 74, 93, Standard Specification for Ferrosilicon, IBR approved for §60.261.
(3) ASTM A101–73, 93, Standard Specification for Ferrochromium, IBR approved for §60.261.
(4) ASTM A482–76, 93, Standard Specification for Ferrochromesilicon, IBR approved for §60.261.
(5) ASTM A483–64, 74 (Reapproved 1988), Standard Specification for Silicomanganese, IBR approved for §60.261.
(6) ASTM A495–76, 94, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved for §60.261.
(7) ASTM D86–78, 82, 90, 93, 95, 96, Distillation of Petroleum Products, IBR approved for §§60.562–2(d), 60.593(d), 60.593a(d), and 60.633(h).

(8) ASTM D129–64, 78, 95, 00, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§60.106(j)(2), 60.335(b)(10)(i), and appendix A: Method 19, 12.5.2.2.3.
(9) ASTM D129–00 (Reapproved 2005), Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §60.4415(a)(1)(i).
(10) ASTM D240–76, 92, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for §§60.46(c), 60.296(b), and appendix A: Method 19, Section 12.5.2.2.3.
(11) ASTM D270–65, 75, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved for appendix A: Method 19, Section 12.5.2.2.1.
(12) ASTM D323–82, 94, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for §§60.111(l), 60.111a(g), 60.111b(g), and 60.116b(f)(2)(ii).
(13) ASTM D388–77, 90, 91, 95, 98a, 99 (Reapproved 2004)e1, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.24(h)(8), 60.41 of subpart D of this part, 60.45(f)(4)(i), 60.45(f)(4)(ii), 60.45(f)(4)(vi), 60.41Da of subpart Da of this part, 60.41b of subpart Db of this part, 60.41c of subpart Dc of this part, 60.251 of subpart Y of this part, and 60.4102.
(14) ASTM D396–78, 89, 90, 92, 96, 98, Standard Specification for Fuel Oils, IBR approved for §§60.41b of subpart Db of this part, 60.41c of subpart Dc of this part, 60.111(b) of subpart K of this part, and 60.111a(b) of subpart Ka of this part.
(15) ASTM D975–78, 96, 98a, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.111(b) of subpart K of this part and 60.111a(b) of subpart Ka of this part.
(16) ASTM D975–08a, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.41b of subpart Db of this part and 60.41c of subpart Dc of this part.
(17) ASTM D1072–80, 90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.335(b)(10)(ii).
(18) ASTM D1072–90 (Reapproved 1999), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.4415(a)(1)(ii).
(19) ASTM D1137–53, 75, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved for §60.45(f)(5)(i).
(20) ASTM D1193–77, 91, Standard Specification for Reagent Water, IBR approved for appendix A: Method 5, Section 7.1.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; Method 6, Section 7.1.1; Method 7, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; Method 26, Section 7.1.2; Method 26A, Section 7.1.2; and Method 29, Section 7.2.2.
(21) ASTM D1266–87, 91, 98, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§60.106(j)(2) and 60.335(b)(10)(i).
(22) ASTM D1266–98 (Reapproved 2003)e1, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §60.4415(a)(1)(i).
(23) ASTM D1475–60 (Reapproved 1980), 90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for §60.435(d)(1), appendix A: Method 24, Section 6.1; and Method 24A, Sections 6.5 and 7.1.
(24) ASTM D1552–83, 95, 01, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§60.106(j)(2), 60.335(b)(10)(i), and appendix A: Method 19, Section 12.5.2.2.3.
(25) ASTM D1552–03, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §60.4415(a)(1)(i).
(26) ASTM D1826–77, 94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved for §§60.45(f)(5)(ii), 60.46(c)(2), 60.296(b)(3), and appendix A: Method 19, Section 12.3.2.4.
(27) ASTM D1835–87, 91, 97, 03a, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da of subpart Da of this part, 60.41b of subpart Db of this part, and 60.41c of subpart Dc of this part.
(28) ASTM D1945–64, 76, 91, 96, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f)(5)(i).
(29) ASTM D1946–77, 90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§60.18(f)(3), 60.45(f)(5)(i), 60.564(f)(1), 60.614(e)(2)(ii), 60.614(e)(4), 60.664(e)(2)(ii), 60.664(e)(4), 60.704(d)(2)(ii), and 60.704(d)(4).
(30) ASTM D2013–72, 86, Standard Method of Preparing Coal Samples for Analysis, IBR approved for appendix A: Method 19, Section 12.5.2.1.3.

(31) ASTM D2015–77 (Reapproved 1978), 96, Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved for §60.45(f)(5)(ii), 60.46(c)(2), and appendix A: Method 19, Section 12.5.2.1.3.
(32) ASTM D2016–74, 83, Standard Test Methods for Moisture Content of Wood, IBR approved for appendix A: Method 28, Section 16.1.1.
(33) ASTM D2234–76, 96, 97b, 98, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A: Method 19, Section 12.5.2.1.1.
(34) ASTM D2369–81, 87, 90, 92, 93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A: Method 24, Section 6.2.
(35) ASTM D2382–76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§60.18(f)(3), 60.485(g)(6), 60.485a(g)(6), 60.564(f)(3), 60.614(e)(4), 60.664(e)(4), and 60.704(d)(4).
(36) ASTM D2504–67, 77, 88 (Reapproved 1993), Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§60.485(g)(5) and 60.485a(g)(5).
(37) ASTM D2584–68 (Reapproved 1985), 94, Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved for §60.685(c)(3)(i).
(38) ASTM D2597–94 (Reapproved 1999), Standard Test Method for Analysis of Demethanized Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography, IBR approved for §60.335(b)(9)(i).
(39) ASTM D2622–87, 94, 98, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§60.106(j)(2) and 60.335(b)(10)(i).
(40) ASTM D2622–05, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a)(1)(i).
(41) ASTM D2879–83, 96, 97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§60.111b(f)(3), 60.116b(e)(3)(ii), 60.116b(f)(2)(i), 60.485(e)(1), and 60.485a(e)(1).
(42) ASTM D2880–78, 96, Standard Specification for Gas Turbine Fuel Oils, IBR approved for §§60.111(b), 60.111a(b), and 60.335(d).
(43) ASTM D2908–74, 91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for §60.564(j).
(44) ASTM D2986–71, 78, 95a, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for appendix A: Method 5, Section 7.1.1; Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.
(45) ASTM D3173–73, 87, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved for appendix A: Method 19, Section 12.5.2.1.3.
(46) ASTM D3176–74, 89, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved for §60.45(f)(5)(i) and appendix A: Method 19, Section 12.3.2.3.
(47) ASTM D3177–75, 89, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved for appendix A: Method 19, Section 12.5.2.1.3.
(48) ASTM D3178–73 (Reapproved 1979), 89, Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved for §60.45(f)(5)(i).
(49) ASTM D3246–81, 92, 96, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.335(b)(10)(ii).
(50) ASTM D3246–05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.4415(a)(1)(ii).
(51) ASTM D3270–73T, 80, 91, 95, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A: Method 13A, Section 16.1.
(52) ASTM D3286–85, 96, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for appendix A: Method 19, Section 12.5.2.1.3.
(53) ASTM D3370–76, 95a, Standard Practices for Sampling Water, IBR approved for §60.564(j).
(54) ASTM D3792–79, 91, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A: Method 24, Section 6.3.
(55) ASTM D4017–81, 90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A: Method 24, Section 6.4.
(56) ASTM D4057–81, 95, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR

approved for appendix A: Method 19, Section 12.5.2.2.3.
(57) ASTM D4057–95 (Reapproved 2000), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a)(1).
(58) ASTM D4084–82, 94, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §60.334(h)(1).
(59) ASTM D4084–05, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §§60.4360 and 60.4415(a)(1)(ii).
(60) ASTM D4177–95, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for appendix A: Method 19, Section 12.5.2.2.1.
(61) ASTM D4177–95 (Reapproved 2000), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a)(1).
(62) ASTM D4239–85, 94, 97, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A: Method 19, Section 12.5.2.1.3.
(63) ASTM D4294–02, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.335(b)(10)(i).
(64) ASTM D4294–03, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a)(1)(i).
(65) ASTM D4442–84, 92, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for appendix A: Method 28, Section 16.1.1.
(66) ASTM D4444–92, Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters, IBR approved for appendix A: Method 28, Section 16.1.1.
(67) ASTM D4457–85 (Reapproved 1991), Test Method for Determination of Dichloromethane and 1, 1, 1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph, IBR approved for appendix A: Method 24, Section 6.5.
(68) ASTM D4468–85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, IBR approved for §§60.335(b)(10)(ii) and 60.4415(a)(1)(ii).
(69) ASTM D4629–02, Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection, IBR approved for §§60.49b(e) and 60.335(b)(9)(i).
(70) ASTM D4809–95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §§60.18(f)(3), 60.485(g)(6), 60.485a(g)(6), 60.564(f)(3), 60.614(d)(4), 60.664(e)(4), and 60.704(d)(4).
(71) ASTM D4810–88 (Reapproved 1999), Standard Test Method for Hydrogen Sulfide in Natural Gas Using Length of Stain Detector Tubes, IBR approved for §§60.4360 and 60.4415(a)(1)(ii).
(72) ASTM D5287–97 (Reapproved 2002), Standard Practice for Automatic Sampling of Gaseous Fuels, IBR approved for §60.4415(a)(1).
(73) ASTM D5403–93, Standard Test Methods for Volatile Content of Radiation Curable Materials, IBR approved for appendix A: Method 24, Section 6.6.
(74) ASTM D5453–00, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for §60.335(b)(10)(i).
(75) ASTM D5453–05, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for §60.4415(a)(1)(i).
(76) ASTM D5504–01, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, IBR approved for §§60.334(h)(1) and 60.4360.
(77) ASTM D5762–02, Standard Test Method for Nitrogen in Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence, IBR approved for §60.335(b)(9)(i).
(78) ASTM D5865–98, Standard Test Method for Gross Calorific Value of Coal and Coke, IBR approved for §60.45(f)(5)(ii), 60.46(c)(2), and appendix A: Method 19, Section 12.5.2.1.3.
(79) ASTM D6216–98, Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications, IBR approved for appendix B, Performance Specification 1.
(80) ASTM D6228–98, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §60.334(h)(1).
(81) ASTM D6228–98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in

Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §§60.4360 and 60.4415.
(82) ASTM D6348–03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, IBR approved for table 7 of subpart IIII of this part and table 2 of subpart JJJJ of this part.
(83) ASTM D6366–99, Standard Test Method for Total Trace Nitrogen and Its Derivatives in Liquid Aromatic Hydrocarbons by Oxidative Combustion and Electrochemical Detection, IBR approved for §60.335(b)(9)(i).
(84) ASTM D6420–99 (Reapproved 2004) Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for table 2 of subpart JJJJ of this part.
(85) ASTM D6522–00, 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, IBR approved for §60.335(a).
(86) ASTM D6522–00 (Reapproved 2005), 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, IBR approved for table 2 of subpart JJJJ of this part.
(87) ASTM D6667–01, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.335(b)(10)(ii).
(88) ASTM D6667–04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.4415(a)(1)(ii).
(89) ASTM D6784–02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), IBR approved for appendix B to part 60, Performance Specification 12A, Section 8.6.2.
(90) ASTM D6784–02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), IBR approved for Appendix B to part 60, Performance Specification 12A, Section 8.6.2 and §60.56c(b)(13) of subpart Ec of this part.
(91) ASTM E169–63, 77, 93, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§60.485a(d)(1), 60.593(b)(2), 60.593a(b)(2), and 60.632(f).
(92) ASTM E260–73, 91, 96, General Gas Chromatography Procedures, IBR approved for §§60.485a(d)(1), 60.593(b)(2), 60.593a(b)(2), and 60.632(f).
(94) ASTM D5865–10 (Approved January 1, 2010), Standard Test Method for Gross Calorific Value of Coal and Coke, IBR approved for §60.45(f)(5)(ii), §60.46(c)(2), and appendix A–7 to part 60, Method 19, section 12.5.2.1.3.
(b) The following material is available for purchase from the Association of Official Analytical Chemists, 1111 North 19th Street, Suite 210, Arlington, VA 22209.
(1) AOAC Method 9, Official Methods of Analysis of the Association of Official Analytical Chemists, 11th edition, 1970, pp. 11–12, IBR approved January 27, 1983 for §§60.204(b)(3), 60.214(b)(3), 60.224(b)(3), 60.234(b)(3).
(c) The following material is available for purchase from the American Petroleum Institute, 1220 L Street NW., Washington, DC 20005.
(1) API Publication 2517, Evaporation Loss from External Floating Roof Tanks, Second Edition, February 1980, IBR approved January 27, 1983, for §§60.111(i), 60.111a(f), 60.111a(f)(1) and 60.116b(e)(2)(i).
(d) The following material is available for purchase from the Technical Association of the Pulp and Paper Industry (TAPPI), Dunwoody Park, Atlanta, GA 30341.
(1) TAPPI Method T624 os–68, IBR approved January 27, 1983 for §60.285(d)(3).
(e) The following material is available for purchase from the Water Pollution Control Federation (WPCF), 2626 Pennsylvania Avenue NW., Washington, DC 20037.
(1) Method 209A, Total Residue Dried at 103–105 °C, in Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980, IBR approved February 25, 1985 for §60.683(b).
(f) The following material is available for purchase from the following address: Underwriter's Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062.
(1) UL 103, Sixth Edition revised as of September 3, 1986, Standard for Chimneys, Factory-built, Residential Type and Building Heating Appliance.
(g) The following material is available for purchase from the following address: West Coast Lumber Inspection Bureau, 6980 SW. Barnes Road, Portland, OR 97223.

(1) West Coast Lumber Standard Grading Rules No. 16, pages 5–21 and 90 and 91, September 3, 1970, revised 1984.
(h) The following material is available for purchase from the American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016–5990.
(1) ASME QRO–1–1994, Standard for the Qualification and Certification of Resource Recovery Facility Operators, IBR approved for §§60.56a, 60.54b(a), 60.54b(b), 60.1185(a), 60.1185(c)(2), 60.1675(a), and 60.1675(c)(2).
(2) ASME PTC 4.1–1964 (Reaffirmed 1991), Power Test Codes: Test Code for Steam Generating Units (with 1968 and 1969 Addenda), IBR approved for §§60.46b of subpart Db of this part, 60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)(3) and 60.1810(a)(3).
(3) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th Edition (1971), IBR approved for §§60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)4), and 60.1810(a)(4).
(4) ANSI/ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], IBR approved for §60.56c(b)(4), §60.63(f)(2) and (f)(4), §60.106(e)(2), §§60.104a(d)(3), (d)(5), (d)(6), (h)(3), (h)(4), (h)(5), (i)(3), (i)(4), (i)(5), (j)(3), and (j)(4), §60.105a(d)(4), (f)(2), (f)(4), (g)(2), and (g)(4), §60.106a(a)(1)(iii), (a)(2)(iii), (a)(2)(v), (a)(2)(viii), (a)(3)(ii), and (a)(3)(v), and §60.107a(a)(1)(ii), (a)(1)(iv), (a)(2)(ii), (c)(2), (c)(4), and (d)(2), tables 1 and 3 of subpart EEEE, tables 2 and 4 of subpart FFFF, table 2 of subpart JJJJ, §§60.4415(a)(2) and (a)(3), 60.2145(s)(1)(i) and (ii), 60.2145(t)(1)(ii), 60.2145(t)(5)(i), 60.2710(s)(1)(i) and (ii), 60.2710(t)(1)(ii), 60.2710(t)(5)(i), 60.2710(w)(3), 60.2730(q)(3), 60.4900(b)(4)(vii) and (viii), 60.4900(b)(5)(i), 60.5220(b)(4)(vii) and (viii), 60.5220(b)(5)(i), tables 1 and 2 to subpart LLLL, and tables 2 and 3 to subpart MMMM.
(j) “Standard Methods for the Examination of Water and Wastewater,” 16th edition, 1985. Method 303F: “Determination of Mercury by the Cold Vapor Technique.” This document may be obtained from the American Public Health Association, 1015 18th Street, NW., Washington, DC 20036, and is incorporated by reference for appendix A to part 60, Method 29, Sections 9.2.3; 10.3; and 11.1.3.
(k) This material is available for purchase from the American Hospital Association (AHA) Service, Inc., Post Office Box 92683, Chicago, Illinois 60675–2683. You may inspect a copy at EPA's Air and Radiation Docket and Information Center (Docket A–91–61, Item IV–J–124), Room M–1500, 1200 Pennsylvania Ave., NW., Washington, DC.
(1) An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities. American Society for Health Care Environmental Services of the American Hospital Association. Chicago, Illinois. 1993. AHA Catalog No. 057007. ISBN 0–87258–673–5. IBR approved for §60.35e and §60.55c.
(l) This material is available for purchase from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161. You may inspect a copy at EPA's Air and Radiation Docket and Information Center (Docket A–91–61, Item IV–J–125), Room M–1500, 1200 Pennsylvania Ave., NW., Washington, DC.
(1) OMB Bulletin No. 93–17: Revised Statistical Definitions for Metropolitan Areas. Office of Management and Budget, June 30, 1993. NTIS No. PB 93–192–664. IBR approved for §60.31e.
(2) [Reserved]
(m) This material is available for purchase from at least one of the following addresses: The Gas Processors Association, 6526 East 60th Street, Tulsa, OK, 74145; or Information Handling Services, 15 Inverness Way East, PO Box 1154, Englewood, CO 80150–1154. You may inspect a copy at EPA's Air and Radiation Docket and Information Center, Room B108, 1301 Constitution Ave., NW., Washington, DC 20460. You may inspect a copy at EPA's Air and Radiation Docket and Information Center, Room 3334, 1301 Constitution Ave., NW., Washington, DC 20460.
(1) Gas Processors Association Standard 2377–86, Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes, 1986 Revision, IBR approved for §§60.105(b)(1)(iv), 60.107a(b)(1)(iv), 60.334(h)(1), 60.4360, and 60.4415(a)(1)(ii).
(2) [Reserved]
(n) This material is available for purchase from IHS Inc., 15 Inverness Way East, Englewood, CO 80112.
(1) International Organization for Standards 8178–4: 1996(E), Reciprocating Internal Combustion Engines—Exhaust Emission Measurement—part 4: Test Cycles for Different Engine Applications, IBR approved for §60.4241(b).
(2) [Reserved]
[48 FR 3735, Jan. 27, 1983]

Editorial Note: ForFederal Registercitations affecting §60.17, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov* .

Editorial Note: At 77 FR 9446, Feb. 16, 2012, §60.17 was amended; however, the amendment could not be incorporated because paragraph (a)(94) already existed.

§ 60.18 General control device and work practice requirements.

(a) *Introduction.* (1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.
(2) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, Appendix A–7, Method 21 monitor.
(b) *Flares.* Paragraphs (c) through (f) apply to flares.
(c)(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).
(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.
(i)(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max}, as determined by the following equation:
$V_{max}=(X_{H2}-K_1)* K_2$
Where:
V_{max}=Maximum permitted velocity, m/sec.
K_1=Constant, 6.0 volume-percent hydrogen.
K_2=Constant, 3.9(m/sec)/volume-percent hydrogen.
X_{H2}=The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946–77. (Incorporated by reference as specified in §60.17).
(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.
(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.
(4)(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.
(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.
(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(6).
(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.
(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be

vented to them.
(f)(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

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where:
H_T=Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \text{Constant}, 1.740 \times 10^{-7} \left(\frac{1}{\text{ppm}}\right) \left(\frac{\text{g mole}}{\text{scm}}\right) \left(\frac{\text{MJ}}{\text{kcal}}\right)$$

where the standard temperature for $\left(\frac{\text{g mole}}{\text{scm}}\right)$ is 20°C;

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C_i=Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946–77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and
H_i=Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809–95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.
(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
(5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.
$\text{Log}_{10}(V_{max})=(H_T+28.8)/31.7$
V_{max}=Maximum permitted velocity, M/sec
28.8=Constant
31.7=Constant
H_T=The net heating value as determined in paragraph (f)(3).
(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation.
$V_{max}=8.706+0.7084\ (H_T)$
V_{max}=Maximum permitted velocity, m/sec
8.706=Constant
0.7084=Constant
H_T=The net heating value as determined in paragraph (f)(3).
(g) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (g), (h), and (i) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, Appendix A–7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, Appendix A–7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (g), (h), and (i) of this section apply to this standard. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (g)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (g), (h), and (i) of this section.
(1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, or 65 that requires monitoring of equipment with a 40 CFR part 60, Appendix A–7, Method 21 monitor.
(2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part

60, Appendix A–7, Method 21 monitor.
(3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.
(4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.
(5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.
(6) *Leak* means:
(i) Any emissions imaged by the optical gas instrument;
(ii) Indications of liquids dripping;
(iii) Indications by a sensor that a seal or barrier fluid system has failed; or
(iv) Screening results using a 40 CFR part 60, Appendix A–7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.
(h) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, Appendix A–7, Method 21 monitor.
(1) An owner or operator of an affected source subject to CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (i) of this section instead of using the 40 CFR part 60, Appendix A–7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.
(2) Any leak detected when following the leak survey procedure in paragraph (i)(3) of this section must be identified for repair as required in the applicable subpart.
(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, Appendix A–7, Method 21 monitor at the leak definition required in the applicable subpart to which the equipment is subject.
(4) The schedule for repair is as required in the applicable subpart.
(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.
(6) When this alternative work practice is used for detecting leaking equipment the following are not applicable for the equipment being monitored:
(i) Skip period leak detection and repair;
(ii) Quality improvement plans; or
(iii) Complying with standards for allowable percentage of valves and pumps to leak.
(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (h)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, Appendix A–7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.
(i) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (i)(1) through (i)(5) of this section.
(1) Instrument Specifications. The optical gas imaging instrument must comply with the requirements in (i)(1)(i) and (i)(1)(ii) of this section.
(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (i)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.
(ii) Provide a date and time stamp for video records of every monitoring event.
(2) Daily Instrument Check. On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (i)(2)(i) of this section in accordance with the procedure specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (i)(2)(v) of this section.
(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (i)(2)(i)(A) and (i)(2)(i)(B) of this section.

(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.
(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (i)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

$$E_{dic} = (E_{sds}) \sum_{i=1}^{k} x_i$$

Where:
E_{dic}= Mass flow rate for the daily instrument check, grams per hour
x_i= Mass fraction of detectable chemical(s) i seen by the optical gas imaging instrument, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level, E_{sds}.
E_{sds}= Standard detection sensitivity level from Table 1 to subpart A, grams per hour
k = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.
(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.
(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.
(iv) Establish a mass flow rate by using the following procedures:
(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.
(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.
(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate specified in paragraph (i)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.
(v) Repeat the procedures specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.
(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under §60.13(i).
(3) Leak Survey Procedure. Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.
(4) Recordkeeping. You must keep the records described in paragraphs (i)(4)(i) through (i)(4)(vii) of this section:
(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.
(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.
(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (i)(2)(i)(A) of this section.
(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (i)(2)(i)(B) of this section.
(v) The daily instrument check. Record the distance, per paragraph (i)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (i)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.
(vi) Recordkeeping requirements in the applicable subpart. A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated

equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.
(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subpart.
(5) Reporting. Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to *CCG-AWP@EPA.GOV.*
[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000; 73 FR 78209, Dec. 22, 2008]

§ 60.19 General notification and reporting requirements.

(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.
(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.
(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
(f)(1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.
(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.
(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a

particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.
(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.
(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.
[59 FR 12428, Mar. 16, 1994, as amended at 64 FR 7463, Feb. 12, 1998]

Table 1 to Subpart A to Part 60–Detection Sensitivity Levels (grams per hour)

Monitoring frequency per subpart[a]	Detection sensitivity level
Bi-Monthly	60
Semi-Quarterly	85
Monthly	100

[a]When this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.
[73 FR 78211, Dec. 22, 2008]

ATTACHMENT B

Subpart A—General Provisions

Source: 59 FR 12430, Mar. 16, 1994, unless otherwise noted.

§ 63.1 Applicability.

(a) *General.* (1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2.
(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.
(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.
(4)(i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.
(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.
(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.
(5) [Reserved]
(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD–13), Research Triangle Park, North Carolina 27711.
(7)–(9) [Reserved]
(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.
(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.
(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in §63.9(i).
(b) *Initial applicability determination for this part.* (1) The provisions of this part apply to the owner or operator of any stationary source that—

(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and
(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.
(2) [Reserved]
(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in §63.10(b)(3).
(c) *Applicability of this part after a relevant standard has been set under this part.* (1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section.
(2) Except as provided in §63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether—
(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);
(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or
(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.
(3)–(4) [Reserved]
(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.
(d) [Reserved]
(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.
[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16595, Apr. 5, 2002]

§ 63.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:
Act means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Pub. L. 101–549, 104 Stat. 2399).
Actual emissions is defined in subpart D of this part for the purpose of granting a compliance extension for an early reduction of hazardous air pollutants.
Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).
Affected source, for the purposes of this part, means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to

section 112 of the Act. Each relevant standard will define the "affected source," as defined in this paragraph unless a different definition is warranted based on a published justification as to why this definition would result in significant administrative, practical, or implementation problems and why the different definition would resolve those problems. The term "affected source," as used in this part, is separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively. This definition of "affected source," and the procedures for adopting an alternative definition of "affected source," shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002.

Alternative emission limitation means conditions established pursuant to sections 112(i)(5) or 112(i)(6) of the Act by the Administrator or by a State with an approved permit program.

Alternative emission standard means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act.

Alternative test method means any method of sampling and analyzing for an air pollutant that is not a test method in this chapter and that has been demonstrated to the Administrator's satisfaction, using Method 301 in appendix A of this part, to produce results adequate for the Administrator's determination that it may be used in place of a test method specified in this part.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).

Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

Commenced means, with respect to construction or reconstruction of an affected source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

Compliance schedule means: (1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or

(2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached; or

(3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

Construction means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Continuous opacity monitoring system (COMS) means a continuous monitoring system that measures the opacity of emissions.

Continuous parameter monitoring system means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Effective date means:

(1) With regard to an emission standard established under this part, the date of promulgation in theFederal Registerof such standard; or

(2) With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of this part.

Emission standard means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

Emissions averaging is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

EPA means the United States Environmental Protection Agency.

Equivalent emission limitation means any maximum achievable control technology emission limitation or requirements which are applicable to a major source of hazardous air pollutants and are adopted by the Administrator (or a State with an approved permit program) on a case-by-case basis, pursuant to section 112(g) or (j) of the Act.

Excess emissions and continuous monitoring system performance report is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

Existing source means any affected source that is not a new source.

Federally enforceable means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

(1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;

(2) New source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;

(3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;

(4) Limitations and conditions that are part of an approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP);

(5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;

(6) Limitations and conditions that are part of an operating permit where the permit and the permitting program pursuant to which it was issued meet all of the following criteria:

(i) The operating permit program has been submitted to and approved by EPA into a State implementation plan (SIP) under section 110 of the CAA;

(ii) The SIP imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not “federally enforceable” by EPA;
(iii) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the SIP or enforceable under the SIP, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are otherwise “federally enforceable”;
(iv) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter; and
(v) The permit in question was issued only after adequate and timely notice and opportunity for comment for EPA and the public.
(7) Limitations and conditions in a State rule or program that has been approved by the EPA under subpart E of this part for the purposes of implementing and enforcing section 112; and
(8) Individual consent agreements that the EPA has legal authority to create.
Fixed capital cost means the capital needed to provide all the depreciable components of an existing source.
Force majeure means, for purposes of §63.7, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.
Fugitive emissions means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.
Hazardous air pollutant means any air pollutant listed in or pursuant to section 112(b) of the Act.
Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.
Major source means 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 considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.
Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring 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.
Monitoring means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of four elements:
(1) Indicator(s) of performance—the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. Indicators of performance may include direct or predicted emissions measurements (including opacity), operational parametric values that correspond to process or control device (and capture system) efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design characteristics. Indicators may be expressed as a single maximum or minimum value, a function of process variables (for example, within a range of pressure drops), a particular operational or work practice status (for example, a damper position, completion of a waste recovery task, materials tracking), or an interdependency between two or among more than two variables.

(2) Measurement techniques—the means by which you gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making records of process conditions or work practices.
(3) Monitoring frequency—the number of times you obtain and record monitoring data over a specified time interval. Examples of monitoring frequencies include at least four points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity monitoring systems, and at least once per operating day (or week, month, etc.) for work practice or design inspections.
(4) Averaging time—the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm.
New affected source means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory that is subject to a section 112(d) or other relevant standard for new sources. This definition of “new affected source,” and the criteria to be utilized in implementing it, shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002. Each relevant standard will define the term “new affected source,” which will be the same as the “affected source” unless a different collection is warranted based on consideration of factors including:
(1) Emission reduction impacts of controlling individual sources versus groups of sources;
(2) Cost effectiveness of controlling individual equipment;
(3) Flexibility to accommodate common control strategies;
(4) Cost/benefits of emissions averaging;
(5) Incentives for pollution prevention;
(6) Feasibility and cost of controlling processes that share common equipment (e.g., product recovery devices);
(7) Feasibility and cost of monitoring; and
(8) Other relevant factors.
New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part establishing an emission standard applicable to such source.
One-hour period, unless otherwise defined in an applicable subpart, means any 60-minute period commencing on the hour.
Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.
Owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source.
Performance audit means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.
Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.
Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.
Permit modification means a change to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).
Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permit revision means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permitting authority means: (1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Pollution Prevention means *source reduction* as defined under the Pollution Prevention Act (42 U.S.C. 13101–13109). The definition is as follows:

(1) *Source reduction* is any practice that:

(i) Reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and

(ii) Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

(2) The term *source reduction* includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

(3) The term *source reduction* does not include any practice that alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service.

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.

Reconstruction, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously nonaffected source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Regulation promulgation schedule means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in theFederal Register.

Relevant standard means:

(1) An emission standard;

(2) An alternative emission standard;

(3) An alternative emission limitation; or

(4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the collection of equipment, activities, or both regulated by such standard or limitation. A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes subpart A of this part, as provided by §63.1(a)(4), and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions

for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:
(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or
(ii) The delegation of authority to such representative is approved in advance by the Administrator.
(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).
(4) For affected sources (as defined in this part) applying for or subject to a title V permit: “responsible official” shall have the same meaning as defined in part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever is applicable.
Run means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.
Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose.
Six-minute period means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.
Source at a Performance Track member facility means a major or area source located at a facility which has been accepted by EPA for membership in the Performance Track Program (as described at *www.epa.gov/PerformanceTrack*) and is still a member of the Program. The Performance Track Program is a voluntary program that encourages continuous environmental improvement through the use of environmental management systems, local community outreach, and measurable results.
Standard conditions means a temperature of 293 K (68 °F) and a pressure of 101.3 kilopascals (29.92 in. Hg).
Startup means the setting in operation of an affected source or portion of an affected source for any purpose.
State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.
Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.
Test method means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of this chapter, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of appendix A of this part.
Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.
Visible emission means the observation of an emission of opacity or optical density above the threshold of vision.
Working day means any day on which Federal Government offices (or State government offices for a State that has obtained delegation under section 112(l)) are open for normal business. Saturdays, Sundays, and official Federal (or where delegated, State) holidays are not working days.
[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16596, Apr. 5, 2002; 68 FR 32600, May 30, 2003; 69 FR 21752, Apr. 22, 2004; 72 FR 27443, May 16, 2007]

§ 63.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:
(a) *System International (SI) units of measure:*
A = ampere
g = gram

Hz = hertz
J = joule
°K = degree Kelvin
kg = kilogram
l = liter
m = meter
m^3 = cubic meter
mg = milligram = 10^{-3}gram
ml = milliliter = 10^{-3}liter
mm = millimeter = 10^{-3}meter
Mg = megagram = 10^6 gram = metric ton
MJ = megajoule
mol = mole
N = newton
ng = nanogram = 10^{-9}gram
nm = nanometer = 10^{-9}meter
Pa = pascal
s = second
V = volt
W = watt
Ω = ohm
μg = microgram = 10^{-6}gram
μl = microliter = 10^{-6}liter
(b) *Other units of measure:*
Btu = British thermal unit
°C = degree Celsius (centigrade)
cal = calorie
cfm = cubic feet per minute
cc = cubic centimeter
cu ft = cubic feet
d = day
dcf = dry cubic feet
dcm = dry cubic meter
dscf = dry cubic feet at standard conditions
dscm = dry cubic meter at standard conditions
eq = equivalent
°F degree Fahrenheit
ft = feet
ft^2 = square feet
ft^3 = cubic feet
gal = gallon
gr = grain
g-eq = gram equivalent
g-mole = gram mole
hr = hour
in. = inch
in. H_2O = inches of water
K = 1,000
kcal = kilocalorie
lb = pound
lpm = liter per minute
meq = milliequivalent
min = minute
MW = molecular weight
oz = ounces

ppb = parts per billion
ppbw = parts per billion by weight
ppbv = parts per billion by volume
ppm = parts per million
ppmw = parts per million by weight
ppmv = parts per million by volume
psia = pounds per square inch absolute
psig = pounds per square inch gage
°R = degree Rankine
scf = cubic feet at standard conditions
scfh = cubic feet at standard conditions per hour
scm = cubic meter at standard conditions
scmm = cubic meter at standard conditions per minute
sec = second
sq ft = square feet
std = at standard conditions
v/v = volume per volume
yd^2 = square yards
yr = year
(c) *Miscellaneous:*
act = actual
avg = average
I.D. = inside diameter
M = molar
N = normal
O.D. = outside diameter
% = percent
[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

§ 63.4 Prohibited activities and circumvention.

(a) *Prohibited activities.* (1) No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under section 112(i)(4) of the Act.
(2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.
(3)–(5) [Reserved]
(b) *Circumvention.* No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to—
(1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;
(2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and
(c) *Fragmentation.* Fragmentation after November 15, 1990 which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability. The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements.
[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

§ 63.5 Preconstruction review and notification requirements.

(a) *Applicability.* (1) This section implements the preconstruction review requirements of section 112(i)(1). After the effective date of a relevant standard, promulgated pursuant to section 112(d), (f), or (h) of the Act, under this part, the preconstruction review requirements in this section apply to the owner or operator of new affected sources and reconstructed affected sources that are major-emitting as specified in this section. New and reconstructed affected sources that commence construction or reconstruction before the effective date of a relevant standard are not subject to the preconstruction review requirements specified in paragraphs (b)(3), (d), and (e) of this section.

(2) This section includes notification requirements for new affected sources and reconstructed affected sources that are not major-emitting affected sources and that are or become subject to a relevant promulgated emission standard after the effective date of a relevant standard promulgated under this part.

(b) *Requirements for existing, newly constructed, and reconstructed sources.* (1) A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

(2) [Reserved]

(3) After the effective date of any relevant standard promulgated by the Administrator under this part, no person may, without obtaining written approval in advance from the Administrator in accordance with the procedures specified in paragraphs (d) and (e) of this section, do any of the following:

(i) Construct a new affected source that is major-emitting and subject to such standard;

(ii) Reconstruct an affected source that is major-emitting and subject to such standard; or

(iii) Reconstruct a major source such that the source becomes an affected source that is major-emitting and subject to the standard.

(4) After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in §63.9(b).

(5) [Reserved]

(6) After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

(c) [Reserved]

(d) *Application for approval of construction or reconstruction.* The provisions of this paragraph implement section 112(i)(1) of the Act.

(1) *General application requirements.* (i) An owner or operator who is subject to the requirements of paragraph (b)(3) of this section must submit to the Administrator an application for approval of the construction or reconstruction. The application must be submitted as soon as practicable before actual construction or reconstruction begins. The application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of §63.9(b)(5). The owner or operator may submit the application for approval well in advance of the date actual construction or reconstruction begins in order to ensure a timely review by the Administrator and that the planned date to begin will not be delayed.

(ii) A separate application shall be submitted for each construction or reconstruction. Each application for approval of construction or reconstruction shall include at a minimum:

(A) The applicant's name and address;

(B) A notification of intention to construct a new major affected source or make any physical or operational change to a major affected source that may meet or has been determined to meet the criteria for a reconstruction, as defined in §63.2 or in the relevant standard;

(C) The address (i.e., physical location) or proposed address of the source;

(D) An identification of the relevant standard that is the basis of the application;

(E) The expected date of the beginning of actual construction or reconstruction;

(F) The expected completion date of the construction or reconstruction;
(G) [Reserved]
(H) The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in the relevant standard, or if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source reported in units and averaging times specified in the relevant standard. The owner or operator may submit percent reduction information if a relevant standard is established in terms of percent reduction. However, operating parameters, such as flow rate, shall be included in the submission to the extent that they demonstrate performance and compliance; and
(I) [Reserved]
(J) Other information as specified in paragraphs (d)(2) and (d)(3) of this section.
(iii) An owner or operator who submits estimates or preliminary information in place of the actual emissions data and analysis required in paragraphs (d)(1)(ii)(H) and (d)(2) of this section shall submit the actual, measured emissions data and other correct information as soon as available but no later than with the notification of compliance status required in §63.9(h) (see §63.9(h)(5)).
(2) *Application for approval of construction.* Each application for approval of construction must include, in addition to the information required in paragraph (d)(1)(ii) of this section, technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including an identification of each type of emission point for each type of hazardous air pollutant that is emitted (or could reasonably be anticipated to be emitted) and a description of the planned air pollution control system (equipment or method) for each emission point. The description of the equipment to be used for the control of emissions must include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions must include an estimated control efficiency (percent) for that method. Such technical information must include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations.
(3) *Application for approval of reconstruction.* Each application for approval of reconstruction shall include, in addition to the information required in paragraph (d)(1)(ii) of this section—
(i) A brief description of the affected source and the components that are to be replaced;
(ii) A description of present and proposed emission control systems (i.e., equipment or methods). The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations;
(iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;
(iv) The estimated life of the affected source after the replacements; and
(v) A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.
(vi) If in the application for approval of reconstruction the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or other requirements, the owner or operator need not submit the information required in paragraphs (d)(3)(iii) through (d)(3)(v) of this section.
(4) *Additional information.* The Administrator may request additional relevant information after the submittal of an application for approval of construction or reconstruction.
(e) *Approval of construction or reconstruction.* (1)(i) If the Administrator determines that, if properly constructed, or reconstructed, and operated, a new or existing source for which an application under paragraph (d) of this section was submitted will not cause emissions in violation of the relevant standard(s) and any other federally enforceable requirements, the Administrator will approve the construction or reconstruction.
(ii) In addition, in the case of reconstruction, the Administrator's determination under this paragraph will be based on:

(A) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;
(B) The estimated life of the source after the replacements compared to the life of a comparable entirely new source;
(C) The extent to which the components being replaced cause or contribute to the emissions from the source; and
(D) Any economic or technical limitations on compliance with relevant standards that are inherent in the proposed replacements.
(2)(i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of construction or reconstruction within 60 calendar days after receipt of sufficient information to evaluate an application submitted under paragraph (d) of this section. The 60-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator 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.
(ii) 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 application for approval of construction or reconstruction, the Administrator will notify the applicant of the Administrator'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 applicant to present, in writing, within 30 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator to enable further action on the application.
(4) A final determination to deny any application for approval will be in writing and will specify the grounds on which the denial is based. The final determination will be made within 60 calendar days of presentation of additional information or arguments (if the application is complete), or within 60 calendar days after the final date specified for presentation if no presentation is made.
(5) Neither the submission of an application for approval nor the Administrator's approval of construction or reconstruction shall—
(i) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or
(ii) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.
(f) *Approval of construction or reconstruction based on prior State preconstruction review.* (1) Preconstruction review procedures that a State utilizes for other purposes may also be utilized for purposes of this section if the procedures are substantially equivalent to those specified in this section. The Administrator will approve an application for construction or reconstruction specified in paragraphs (b)(3) and (d) of this section if the owner or operator of a new affected source or reconstructed affected source, who is subject to such requirement meets the following conditions:
(i) The owner or operator of the new affected source or reconstructed affected source has undergone a preconstruction review and approval process in the State in which the source is (or would be) located and has received a federally enforceable construction permit that contains a finding that the source will meet the relevant promulgated emission standard, if the source is properly built and operated.
(ii) Provide a statement from the State or other evidence (such as State regulations) that it considered the factors specified in paragraph (e)(1) of this section.
(2) The owner or operator must submit to the Administrator the request for approval of construction or reconstruction under this paragraph (f)(2) no later than the application deadline specified in paragraph (d)(1) of this section (see also §63.9(b)(2)). The owner or operator must include in the request information sufficient for the Administrator's determination. The Administrator will evaluate the owner or operator's request in accordance with the procedures specified in paragraph (e) of this section. The Administrator

may request additional relevant information after the submittal of a request for approval of construction or reconstruction under this paragraph (f)(2).
[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

§ 63.6 Compliance with standards and maintenance requirements.

(a) *Applicability.* (1) The requirements in this section apply to the owner or operator of affected sources for which any relevant standard has been established pursuant to section 112 of the Act and the applicability of such requirements is set out in accordance with §63.1(a)(4) unless—
(i) The Administrator (or a State with an approved permit program) has granted an extension of compliance consistent with paragraph (i) of this section; or
(ii) The President has granted an exemption from compliance with any relevant standard in accordance with section 112(i)(4) of the Act.
(2) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source, such source shall be subject to the relevant emission standard or other requirement.
(b) *Compliance dates for new and reconstructed sources.* (1) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after proposal of a relevant standard that has an initial startup before the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard not later than the standard's effective date.
(2) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source that has an initial startup after the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard upon startup of the source.
(3) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under this part pursuant to section 112(d), 112(f), or 112(h) of the Act but before the effective date (that is, promulgation) of such standard shall comply with the relevant emission standard not later than the date 3 years after the effective date if:
(i) The promulgated standard (that is, the relevant standard) is more stringent than the proposed standard; for purposes of this paragraph, a finding that controls or compliance methods are "more stringent" must include control technologies or performance criteria and compliance or compliance assurance methods that are different but are substantially equivalent to those required by the promulgated rule, as determined by the Administrator (or his or her authorized representative); and
(ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.
(4) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of a relevant standard established pursuant to section 112(f) shall not be required to comply with the section 112(f) emission standard until the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112(f) standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator must comply with the standard as provided in paragraphs (b)(1) and (2) of this section.
(5) The owner or operator of a new source that is subject to the compliance requirements of paragraph (b)(3) or (4) of this section must notify the Administrator in accordance with §63.9(d)
(6) [Reserved]
(7) When an area source becomes a major source by the addition of equipment or operations that meet the definition of new affected source in the relevant standard, the portion of the existing facility that is a new affected source must comply with all requirements of that standard applicable to new sources. The source owner or operator must comply with the relevant standard upon startup.
(c) *Compliance dates for existing sources.* (1) After the effective date of a relevant standard established under this part pursuant to section 112(d) or 112(h) of the Act, the owner or operator of an existing source shall comply with such standard by the compliance date established by the Administrator in the applicable subpart(s) of this part. Except as otherwise provided for in section 112 of the Act, in no case will the

compliance date established for an existing source in an applicable subpart of this part exceed 3 years after the effective date of such standard.
(2) If an existing source is subject to a standard established under this part pursuant to section 112(f) of the Act, the owner or operator must comply with the standard by the date 90 days after the standard's effective date, or by the date specified in an extension granted to the source by the Administrator under paragraph (i)(4)(ii) of this section, whichever is later.
(3)–(4) [Reserved]
(5) Except as provided in paragraph (b)(7) of this section, the owner or operator of an area source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source shall be subject to relevant standards for existing sources. Such sources must comply by the date specified in the standards for existing area sources that become major sources. If no such compliance date is specified in the standards, the source shall have a period of time to comply with the relevant emission standard that is equivalent to the compliance period specified in the relevant standard for existing sources in existence at the time the standard becomes effective.
(d) [Reserved]
(e) *Operation and maintenance requirements.* (1)(i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator 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. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable 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 (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.
(ii) Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.
(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.
(2) [Reserved]
(3) *Startup, shutdown, and malfunction plan.* (i) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to—
(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;
(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and
(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).
(ii) [Reserved]

(iii) When actions taken by the owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, the owner or operator must keep records of these events as specified in paragraph 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in §63.10(d)(5).
(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with §63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).
(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.
(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.
(vii) Based on the results of a determination made under paragraph (e)(1)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
(A) Does not address a startup, shutdown, or malfunction event that has occurred;
(B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or
(D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in §63.2.
(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by §63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.
(ix) The title V permit for an affected source must require that the owner or operator develop a startup, shutdown, and malfunction plan which conforms to the provisions of this part, but may do so by citing to the relevant subpart or subparagraphs of paragraph (e) of this section. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter and the elements of the startup, shutdown, and malfunction plan shall not be considered an applicable requirement as defined in §70.2 and §71.2 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.
(f) *Compliance with nonopacity emission standards* —(1) *Applicability.* The non-opacity emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.
(2) *Methods for determining compliance.* (i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in §63.7, unless otherwise specified in an applicable subpart of this part.
(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in §63.6(e) and applicable subparts of this part.
(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—
(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;
(B) The performance test was conducted under representative operating conditions for the source;
(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e) of this subpart; and
(D) The performance test was appropriately quality-assured, as specified in §63.7(c).
(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.
(3) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.
(g) *Use of an alternative nonopacity emission standard.* (1) If, in the Administrator's judgment, an owner or operator of an affected source has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in theFederal Registera notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. AnyFederal Registernotice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.
(2) An owner or operator requesting permission under this paragraph shall, unless otherwise specified in an applicable subpart, submit a proposed test plan or the results of testing and monitoring in accordance with §63.7 and §63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in §63.7 and §63.8.
(3) The Administrator may establish general procedures in an applicable subpart that accomplish the requirements of paragraphs (g)(1) and (g)(2) of this section.
(h) *Compliance with opacity and visible emission standards* —(1) *Applicability.* The opacity and visible emission standards set forth in this part must apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.
(2) *Methods for determining compliance.* (i) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable subpart. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance with numerical opacity emission standards in this part, compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting observations in accordance with Test Method 9 in appendix A of part 60 of this chapter or the method specified in paragraph (h)(7)(ii) of this section. Whenever a visible emission test method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of part 60 of this chapter.
(ii) [Reserved]
(iii) If an affected source undergoes opacity or visible emission testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—
(A) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;

(B) The opacity or visible emission test was conducted under representative operating conditions for the source;
(C) The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e); and
(D) The opacity or visible emission test was appropriately quality-assured, as specified in §63.7(c) of this section.
(3) [Reserved]
(4) *Notification of opacity or visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting opacity or visible emission observations in accordance with §63.9(f), if such observations are required for the source by a relevant standard.
(5) *Conduct of opacity or visible emission observations.* When a relevant standard under this part includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:
(i) For the purpose of demonstrating initial compliance, opacity or visible emission observations shall be conducted concurrently with the initial performance test required in §63.7 unless one of the following conditions applies:
(A) If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new sources that start up before the standard's effective date. If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 120 days after the compliance date for an existing or modified source; or
(B) If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, or within the time period specified in paragraph (h)(5)(i)(A) of this section, the source's owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under §63.7. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Test Method 9 or Test Method 22 in appendix A of part 60 of this chapter.
(ii) For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours (30 6-minute averages) for the performance test or other required set of observations (e.g., for fugitive-type emission sources subject only to an opacity emission standard).
(iii) The owner or operator of an affected source to which an opacity or visible emission standard in this part applies shall conduct opacity or visible emission observations in accordance with the provisions of this section, record the results of the evaluation of emissions, and report to the Administrator the opacity or visible emission results in accordance with the provisions of §63.10(d).
(iv) [Reserved]
(v) Opacity readings of portions of plumes that contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity emission standards.
(6) *Availability of records.* The owner or operator of an affected source shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.
(7) *Use of a continuous opacity monitoring system.* (i) The owner or operator of an affected source required to use a continuous opacity monitoring system (COMS) shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results in accordance with the provisions of §63.10(e)(4).
(ii) Whenever an opacity emission test method has not been specified in an applicable subpart, or an owner or operator of an affected source is required to conduct Test Method 9 observations (see appendix

A of part 60 of this chapter), the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under §63.7 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the Administrator of that decision, in writing, simultaneously with the notification under §63.7(b) of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under §63.7, unless the owner or operator notifies the Administrator in writing to the contrary not later than with the notification under §63.7(b) of the date the subsequent performance test is scheduled to begin.
(iii) For the purposes of determining compliance with the opacity emission standard during a performance test required under §63.7 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.
(iv) The owner or operator of an affected source using a COMS for compliance purposes is responsible for demonstrating that he/she has complied with the performance evaluation requirements of §63.8(e), that the COMS has been properly maintained, operated, and data quality-assured, as specified in §63.8(c) and §63.8(d), and that the resulting data have not been altered in any way.
(v) Except as provided in paragraph (h)(7)(ii) of this section, the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in §63.8(c), and met Performance Specification 1 in appendix B of part 60 of this chapter, and that the resulting data have not been altered in any way.
(8) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard (including the written reports of the results of the performance tests required by §63.7, the results of Test Method 9 or another required opacity or visible emission test method, the observer certification required by paragraph (h)(6) of this section, and the continuous opacity monitoring system results, whichever is/are applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.
(9) *Adjustment to an opacity emission standard.* (i) If the Administrator finds under paragraph (h)(8) of this section that an affected source is in compliance with all relevant standards for which initial performance tests were conducted under §63.7, but during the time such performance tests were conducted fails to meet any relevant opacity emission standard, the owner or operator of such source may petition the Administrator to make appropriate adjustment to the opacity emission standard for the affected source. Until the Administrator notifies the owner or operator of the appropriate adjustment, the relevant opacity emission standard remains applicable.
(ii) The Administrator may grant such a petition upon a demonstration by the owner or operator that—
(A) The affected source and its associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the performance tests;
(B) The performance tests were performed under the conditions established by the Administrator; and
(C) The affected source and its associated air pollution control equipment were incapable of being adjusted or operated to meet the relevant opacity emission standard.
(iii) The Administrator will establish an adjusted opacity emission standard for the affected source meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity emission standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity emission standard in theFederal Register.
(iv) After the Administrator promulgates an adjusted opacity emission standard for an affected source, the owner or operator of such source shall be subject to the new opacity emission standard, and the new opacity emission standard shall apply to such source during any subsequent performance tests.
(i) *Extension of compliance with emission standards.* (1) Until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part.

(2) *Extension of compliance for early reductions and other reductions* —(i) *Early reductions.* Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator (or the State with an approved permit program) will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D.
(ii) *Other reductions.* Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) (as defined in section 169(3) of the Act) or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.
(3) *Request for extension of compliance.* Paragraphs (i)(4) through (i)(7) of this section concern requests for an extension of compliance with a relevant standard under this part (except requests for an extension of compliance under paragraph (i)(2)(i) of this section will be handled through procedures specified in subpart D of this part).
(4)(i)(A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a 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) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 1-year extension of compliance is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant. The owner or operator of an affected source who has requested an extension of compliance under this paragraph 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 will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.
(B) Any request under this paragraph for an extension of compliance with a relevant standard 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 paragraphs (b) and (c) of this section), except as provided for in paragraph (i)(4)(i)(C) of this section. Nonfrivolous requests submitted under this paragraph 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. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards.
(C) An owner or operator may submit a compliance extension request after the date specified in paragraph (i)(4)(i)(B) 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 (i)(6)(i) 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 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.
(ii) The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of

compliance with a relevant standard under this paragraph must be submitted in writing to the Administrator not later than 90 calendar days after the effective date of the relevant standard.
(5) The owner or operator of an existing source that has installed BACT or technology required to meet LAER [as specified in paragraph (i)(2)(ii) of this section] prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.
(6)(i) The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:
(A) A description of the controls to be installed to comply with the standard;
(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:
(*1*) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated; and
(*2*) The date by which final compliance is to be achieved.
(*3*) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and
(*4*) The date by which final compliance is to be achieved;
(C)–(D)
(ii) The request for a compliance extension under paragraph (i)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.
(7) Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).
(8) *Approval of request for extension of compliance.* Paragraphs (i)(9) through (i)(14) of this section concern approval of an extension of compliance requested under paragraphs (i)(4) through (i)(6) of this section.
(9) Based on the information provided in any request made under paragraphs (i)(4) through (i)(6) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with an emission standard, as specified in paragraphs (i)(4) and (i)(5) of this section.
(10) The extension will be in writing and will—
(i) Identify each affected source covered by the extension;
(ii) Specify the termination date of the extension;
(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;
(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and
(v)(A) Under paragraph (i)(4), 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; or
(B) Under paragraph (i)(5), specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.
(11) The owner or operator of an existing source that has been granted an extension of compliance under paragraph (i)(10) 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. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (i)(10) of this section.
(12)(i) 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 (i)(4)(i) or (i)(5) 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.
(ii) 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.
(iii) 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—
(A) Notice of the information and findings on which the intended denial is based; and
(B) 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.
(iv) 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.
(13)(i) The Administrator 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 (i)(4)(ii) of this section. 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. 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 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.
(ii) 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 15 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.
(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with—
(A) Notice of the information and findings on which the intended denial is based; and
(B) 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 before further action on the request.
(iv) A 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.
(14) 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 (i)(10)(iii) or (iv) 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:
(i) Notice of the reason for termination; 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 determination to terminate, additional information or arguments to the Administrator before further action on the termination.

(iii) 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.
(15) [Reserved]
(16) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.
(j) *Exemption from compliance with emission standards.* The President may exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years.
[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16599, Apr. 5, 2002; 68 FR 32600, May 30, 2003; 71 FR 20454, Apr. 20, 2006]

§ 63.7 Performance testing requirements.

(a) *Applicability and performance test dates.* (1) The applicability of this section is set out in §63.1(a)(4).
(2) Except as provided in paragraph (a)(4) of this section, if required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of paragraph (c)(3)(ii)(B) of this section apply, the owner or operator of the affected source must perform such tests within 180 days of the compliance date for such source.
(i)–(viii) [Reserved]
(ix) Except as provided in paragraph (a)(4) of this section, when an emission standard promulgated under this part is more stringent than the standard proposed (see §63.6(b)(3)), the owner or operator of a new or reconstructed source subject to that standard for which construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the owner or operator may choose to demonstrate compliance with either the proposed or the promulgated standard. If the owner or operator chooses to comply with the proposed standard initially, the owner or operator shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source, whichever is later, to demonstrate compliance with the promulgated standard.
(3) The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.
(4) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure:
(i) The owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline specified in paragraph (a)(2) or (a)(3) of this section, or elsewhere in this part, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.
(ii) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.
(iii) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.
(iv) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(4)(i), (a)(4)(ii), and (a)(4)(iii) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.

(b) *Notification of performance test.* (1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review an approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test.
(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in paragraph (b)(1) of this section due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.
(c) *Quality assurance program.* (1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test.
(2)(i) *Submission of site-specific test plan.* Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.
(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.
(iii) The performance testing shall include a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. Gaseous audit samples are designed to audit the performance of the sampling system as well as the analytical system and must be collected by the sampling system during the compliance test just as the compliance samples are collected. If a liquid or solid audit sample is designed to audit the sampling system, it must also be collected by the sampling system during the compliance test. If multiple sampling systems or sampling trains are used during the compliance test for any of the test methods, the tester is only required to use one of the sampling systems per method to collect the audit sample. The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system and at the same time as the compliance samples. Retests are required when there is a failure to produce acceptable results for an audit sample. However, if the audit results do not affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. Acceptance of the test results shall constitute a waiver of the reanalysis requirement, further audits, or retests. The compliance authority may also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample. For pollutants that exist in the gas phase at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in air or nitrogen that can be introduced into the sampling system of the test method at or near the same entry point as a sample from the emission source. If no gas phase audit samples are available, an acceptable alternative is a sample of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. For samples that exist only in a liquid or solid form at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. An accredited audit sample provider (AASP) is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.
(A) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. No

audit samples are required for the following test methods: Methods 3C of Appendix A–3 of Part 60, Methods 6C, 7E, 9, and 10 of Appendix A–4 of Part 60, Method 18 of Appendix A–6 of Part 60, Methods 20, 22, and 25A of Appendix A–7 of Part 60, and Methods 303, 318, 320, and 321 of Appendix A of Part 63. If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test. The compliance authority responsible for the compliance test may waive the requirement to include an audit sample if they believe that an audit sample is not necessary. "Commercially available" means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, *http://www.epa.gov/ttn/emc,* to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test. When ordering an audit sample, the source owner, operator, or representative shall give the sample provider an estimate for the concentration of each pollutant that is emitted by the source or the estimated concentration of each pollutant based on the permitted level and the name, address, and phone number of the compliance authority. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and report to the AASP. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The tester may request and the compliance authority may grant a waiver to the requirement that a representative of the compliance authority must be present at the testing site during the field analysis of an audit sample. The source owner, operator, or representative may report the results of the audit sample to the compliance authority and then report the results of the audit sample to the AASP prior to collecting any emission samples. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

(B) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:

(1) Preparing the sample;

(2) Confirming the true concentration of the sample;

(3) Defining the acceptance limits for the results from a well qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range;

(4) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;

(*5*) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;

(*6*) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;

(*7*) Reporting the results from each audit sample in a timely manner to the compliance authority and to the source owner, operator, or representative by the AASP. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may

report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.
(*8*) Evaluating the acceptance limits of samples at least once every two years to determine in consultation with the voluntary consensus standard body if they should be changed.
(*9*) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.
(C) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria document that describes how audit samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:
(*1*) Checking audit samples to confirm their true value as reported by the AASP.
(*2*) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years.
(*3*) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.
(D) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). The VCSB shall operate in accordance with the procedures and requirements in the Office of Management and Budget *Circular A–119* . A copy of Circular A–119 is available upon request by writing the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, by calling (202) 395–6880 or downloading online at *http://standards.gov/standards_gov/a119.cfm* . The VCSB shall approve all accrediting bodies. The Administrator will review all technical criteria documents. If the technical criteria documents do not meet the minimum technical requirements in paragraphs (c)(2)(iii)(B) through (C) of this section, the technical criteria documents are not acceptable and the proposed audit sample program is not capable of producing audit samples of sufficient quality to be used in a compliance test. All acceptable technical criteria documents shall be posted on the EPA Web site at the following URL, *http://www.epa.gov/ttn/emc* .
(iv) The owner or operator of an affected source shall submit the site-specific test plan to the Administrator upon the Administrator's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under paragraph (b) of this section, or on a mutually agreed upon date.
(v) The Administrator may request additional relevant information after the submittal of a site-specific test plan.
(3) *Approval of site-specific test plan.* (i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under paragraph (c)(3)(i)(B) of this section. Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator's intention to disapprove the plan together with—
(A) Notice of the information and findings on which the intended disapproval is based; and
(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan.
(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in paragraph (c)(3)(i) of this section, the following conditions shall apply:
(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see paragraph (e)(2)(i) of this section), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see paragraph (f) of this section). However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.
(iii) Neither the submission of a site-specific test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—
(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or
(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.
(d) *Performance testing facilities.* If required to do performance testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source, shall provide performance testing facilities as follows:
(1) Sampling ports adequate for test methods applicable to such source. This includes:
(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and
(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;
(2) Safe sampling platform(s);
(3) Safe access to sampling platform(s);
(4) Utilities for sampling and testing equipment; and
(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.
(e) *Conduct of performance tests.* (1) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under §63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.
(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of this chapter unless the Administrator—
(i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in §63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see paragraph (c) of this section); or
(ii) Approves the use of an intermediate or major change or alternative to a test method (see definitions in §63.90(a)), the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or
(iii) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or
(iv) Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that—
(i) A sample is accidentally lost after the testing team leaves the site; or
(ii) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or
(iii) Extreme meteorological conditions occur; or
(iv) Other circumstances occur that are beyond the owner or operator's control.
(4) Nothing in paragraphs (e)(1) through (e)(3) of this section shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.
(f) *Use of an alternative test method* —(1) *General.* Until authorized to use an intermediate or major change or alternative to a test method, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.
(2) The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator—
(i) Notifies the Administrator of his or her intention to use an alternative test method at least 60 days before the performance test is scheduled to begin;
(ii) Uses Method 301 in appendix A of this part to validate the alternative test method. This may include the use of specific procedures of Method 301 if use of such procedures are sufficient to validate the alternative test method; and
(iii) Submits the results of the Method 301 validation process along with thnotification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this paragraph well in advance of the deadline specified in paragraph (f)(2)(i) of this section to ensure a timely review by the Administrator in order to meet the performance test date specified in this section or the relevant standard.
(3) The Administrator will determine whether the owner or operator's validation of the proposed alternative test method is adequate and issue an approval or disapproval of the alternative test method. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method. However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval/disapproval 45 days after submission of the request to use an alternative method and the request satisfies the requirements in paragraph (f)(2) of this section. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.
(4) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.
(5) If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of such source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method as allowed under §63.7(f).
(6) Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator's responsibility to comply with the requirements of this part.
(g) *Data analysis, recordkeeping, and reporting.* (1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is “completed” when field sample collection is terminated. The owner or operator of an affected source shall

report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator (see §63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.
(2) [Reserved]
(3) For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.
(h) *Waiver of performance tests.* (1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.
(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.
(3) *Request to waive a performance test.* (i) If a request is made for an extension of compliance under §63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under paragraph (c) of this section is not submitted.
(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under §63.6(i), §63.9(h), and §63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least 60 days before the performance test if the site-specific test plan required under paragraph (c) of this section is not submitted.
(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.
(4) *Approval of request to waive performance test.* The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (h)(3) of this section when he/she—
(i) Approves or denies an extension of compliance under §63.6(i)(8); or
(ii) Approves or disapproves a site-specific test plan under §63.7(c)(3); or
(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or
(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.
(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.
[59 FR 12430, Mar. 16, 1994, as amended at 65 FR 62215, Oct. 17, 2000; 67 FR 16602, Apr. 5, 2002; 72 FR 27443, May 16, 2007; 75 FR 55655, Sept. 13, 2010]

§ 63.8 Monitoring requirements.

(a) *Applicability.* (1) The applicability of this section is set out in §63.1(a)(4).
(2) For the purposes of this part, all CMS required under relevant standards shall be subject to the provisions of this section upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Administrator.

(3) [Reserved]
(4) Additional monitoring requirements for control devices used to comply with provisions in relevant standards of this part are specified in §63.11.
(b) *Conduct of monitoring.* (1) Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator—
(i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures (see §63.90(a) for definition); or
(ii) Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures (see §63.90(a) for definition).
(iii) Owners or operators with flares subject to §63.11(b) are not subject to the requirements of this section unless otherwise specified in the relevant standard.
(2)(i) When the emissions from two or more affected sources are combined before being released to the atmosphere, the owner or operator may install an applicable CMS for each emission stream or for the combined emissions streams, provided the monitoring is sufficient to demonstrate compliance with the relevant standard.
(ii) If the relevant standard is a mass emission standard and the emissions from one affected source are released to the atmosphere through more than one point, the owner or operator must install an applicable CMS at each emission point unless the installation of fewer systems is—
(A) Approved by the Administrator; or
(B) Provided for in a relevant standard (e.g., instead of requiring that a CMS be installed at each emission point before the effluents from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device).
(3) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the owner or operator shall report the results from the CMS used to meet the monitoring requirements of this part. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the owner or operator shall report the results from each CMS for the relevant compliance period.
(c) *Operation and maintenance of continuous monitoring systems.* (1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices. (i) The owner or operator of an affected source must maintain and operate each CMS as specified in §63.6(e)(1).
(ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.
(iii) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan for CMS as specified in §63.6(e)(3).
(2)(i) All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).
(ii) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.
(3) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under §63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.
(4) Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
(i) All COMS shall 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.
(ii) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(5) Unless otherwise approved by the Administrator, minimum procedures for COMS shall include a method for producing a simulated zero opacity condition and an upscale (high-level) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of all the analyzer's internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity.

(6) The owner or operator of a CMS that is not a CPMS, which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity. The CPMS must be calibrated prior to use for the purposes of complying with this section. The CPMS must be checked daily for indication that the system is responding. If the CPMS system includes an internal system check, results must be recorded and checked daily for proper operation.

(7)(i) A CMS is out of control if—

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or

(B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

(C) The COMS CD exceeds two times the limit in the applicable performance specification in the relevant standard.

(ii) When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

(8) The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in §63.10(e)(3).

(d) *Quality control program.* (1) The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

(2) The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

(i) Initial and any subsequent calibration of the CMS;

(ii) Determination and adjustment of the calibration drift of the CMS;

(iii) Preventive maintenance of the CMS, including spare parts inventory;

(iv) Data recording, calculations, and reporting;

(v) Accuracy audit procedures, including sampling and analysis methods; and

(vi) Program of corrective action for a malfunctioning CMS.
(3) The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts.
(e) *Performance evaluation of continuous monitoring systems* —(1) *General.* When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.
(2) *Notification of performance evaluation.* The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under §63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.
(3)(i) *Submission of site-specific performance evaluation test plan.* Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.
(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.
(iii) The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).
(iv) The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.
(v) In the event that the Administrator fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified in §63.7(c)(3), the following conditions shall apply:
(A) If the owner or operator intends to demonstrate compliance using the monitoring method(s) specified in the relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this subpart using the specified method(s);
(B) If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance evaluation until the Administrator approves the use of the alternative method. If the Administrator does not approve the use of the alternative method within 30 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in paragraph (e)(4) of this section may be extended such that the owner or operator shall conduct the performance evaluation within 60 calendar days after the Administrator approves the use of the alternative method. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance evaluation as required in this section (without the Administrator's prior approval of the site-specific performance evaluation test plan) if he/she subsequently chooses to use the specified monitoring method(s) instead of an alternative.

(vi) Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) *Conduct of performance evaluation and performance evaluation dates.* The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under §63.7 in accordance with the applicable performance specification as specified in the relevant standard. Notwithstanding the requirement in the previous sentence, if the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under §63.6(h)(7), he/she shall conduct a performance evaluation of the COMS as specified in the relevant standard, before the performance test required under §63.7 is conducted in time to submit the results of the performance evaluation as specified in paragraph (e)(5)(ii) of this section. If a performance test is not required, or the requirement for a performance test has been waived under §63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in §63.7(a), or as otherwise specified in the relevant standard.

(5) *Reporting performance evaluation results.* (i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation simultaneously with the results of the performance test required under §63.7 or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard. The Administrator may request that the owner or operator submit the raw data from a performance evaluation in the report of the performance evaluation results.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation under this paragraph. The copies shall be provided at least 15 calendar days before the performance test required under §63.7 is conducted.

(f) *Use of an alternative monitoring method* —(1) *General.* Until permission to use an alternative monitoring procedure (minor, intermediate, or major changes; see definition in §63.90(a)) has been granted by the Administrator under this paragraph (f)(1), the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:

(i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;

(ii) Alternative monitoring requirements when the affected source is infrequently operated;

(iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;

(iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;

(v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;

(vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;

(vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;

(viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or

(ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.
(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.
(4)(i) *Request to use alternative monitoring procedure.* An owner or operator who wishes to use an alternative monitoring procedure must submit an application to the Administrator as described in paragraph (f)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring procedure is not the performance test method used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring procedure will serve as the performance test method that is to be used to demonstrate compliance with a relevant standard, the application must be submitted at least 60 days before the performance evaluation is scheduled to begin and must meet the requirements for an alternative test method under §63.7(f).
(ii) The application must contain a description of the proposed alternative monitoring system which addresses the four elements contained in the definition of monitoring in §63.2 and a performance evaluation test plan, if required, as specified in paragraph (e)(3) of this section. In addition, the application must include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.
(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (f)(4)(i) above to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.
(iv) Application for minor changes to monitoring procedures, as specified in paragraph (b)(1) of this section, may be made in the site-specific performance evaluation plan.
(5) *Approval of request to use alternative monitoring procedure.* (i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. If a request for a minor change is made in conjunction with site-specific performance evaluation plan, then approval of the plan will constitute approval of the minor change. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with—
(A) Notice of the information and findings on which the intended disapproval is based; and
(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.
(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.
(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by §63.8(f).
(6) *Alternative to the relative accuracy test.* An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:
(i) *Criteria for approval of alternative procedures.* An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in §63.7, or other tests performed following the criteria in §63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency

levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.
(ii) *Petition to use alternative to relative accuracy test.* The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.
(iii) *Rescission of approval to use alternative to relative accuracy test.* The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.
(g) *Reduction of monitoring data.* (1) The owner or operator of each CMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5) of this section.
(2) The owner or operator of each COMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in §63.2.
(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2or ng/J of pollutant).
(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).
(5) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under this part. For the owner or operator complying with the requirements of §63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.
[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16603, Apr. 5, 2002; 71 FR 20455, Apr. 20, 2006]

§ 63.9 Notification requirements.

(a) *Applicability and general information.* (1) The applicability of this section is set out in §63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.
(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.
(4)(i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).
(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.
(b) *Initial notifications.* (1)(i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.
(ii) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements of this section.
(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under §63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph.
(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:
(i) The name and address of the owner or operator;
(ii) The address (i.e., physical location) of the affected source;
(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
(iv) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and
(v) A statement of whether the affected source is a major source or an area source.
(3) [Reserved]
(4) The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under §63.5(d) must provide the following information in writing to the Administrator:
(i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i); and
(ii)–(iv) [Reserved]
(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.
(5) The owner or operator of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required under §63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source, and
(ii) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.
(iii) Unless the owner or operator has requested and received prior permission from the Administrator to submit less than the information in §63.5(d), the notification must include the information required on the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i).
(c) *Request for extension of compliance.* If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with §63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §63.6(i)(4) through §63.6(i)(6).
(d) *Notification that source is subject to special compliance requirements.* An owner or operator of a new source that is subject to special compliance requirements as specified in §63.6(b)(3) and §63.6(b)(4) shall notify the Administrator of his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.
(e) *Notification of performance test.* The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under §63.7(c), if requested by the Administrator, and to have an observer present during the test.
(f) *Notification of opacity and visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in §63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, the owner or operator shall deliver or postmark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.
(g) *Additional notification requirements for sources with continuous monitoring systems.* The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:
(1) A notification of the date the CMS performance evaluation under §63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under §63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under §63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;
(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by §63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by §63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and
(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by §63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked not later than 10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.
(h) *Notification of compliance status.* (1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.
(2)(i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list—
(A) The methods that were used to determine compliance;

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;
(E) If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);
(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.
(ii) The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.
(3) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.
(4) [Reserved]
(5) If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in §63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of §63.5, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.
(6) Advice on a notification of compliance status may be obtained from the Administrator.
(i) *Adjustment to time periods or postmark deadlines for submittal and review of required communications.*
(1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (i)(2) and (i)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.
(ii) An owner or operator shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.
(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the

request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.
(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.
(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.
(j) *Change in information already provided.* Any change in the information already provided under this section shall be provided to the Administrator in writing within 15 calendar days after the change.
[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16604, Apr. 5, 2002; 68 FR 32601, May 30, 2003]

§ 63.10 Recordkeeping and reporting requirements.

(a) *Applicability and general information.* (1) The applicability of this section is set out in §63.1(a)(4).
(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.
(3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.
(4)(i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).
(ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any reports at its discretion.
(5) If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in §63.9(i).
(6) If an owner or operator supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in §63.9(i).
(7) If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary

source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this provision are specified in §63.9(i).

(b) *General recordkeeping requirements.* (1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of—

(i) The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards;

(ii) The occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment;

(iii) All required maintenance performed on the air pollution control and monitoring equipment;

(iv)(A) Actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)); or

(B) Actions taken during periods of malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3));

(v) All information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)) when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a “checklist,” or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

(vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);

(vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the

delegated authority determines these records are required to more accurately assess the compliance status of the affected source.
(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
(x) All CMS calibration checks;
(xi) All adjustments and maintenance performed on CMS;
(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;
(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under §63.8(f)(6); and
(xiv) All documentation supporting initial notifications and notifications of compliance status under §63.9.
(3) *Recordkeeping requirement for applicability determinations.* If an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f), and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under this part) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any. The requirements to determine applicability of a standard under §63.1(b)(3) and to record the results of that determination under paragraph (b)(3) of this section shall not by themselves create an obligation for the owner or operator to obtain a title V permit.
(c) *Additional recordkeeping requirements for sources with continuous monitoring systems.* In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of—
(1) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);
(2)–(4) [Reserved]
(5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;
(6) The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);
(7) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;
(8) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;
(9) [Reserved]
(10) The nature and cause of any malfunction (if known);
(11) The corrective action taken or preventive measures adopted;
(12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

(13) The total process operating time during the reporting period; and
(14) All procedures that are part of a quality control program developed and implemented for CMS under §63.8(d).
(15) In order to satisfy the requirements of paragraphs (c)(10) through (c)(12) of this section and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in §63.6(e), provided that such plan and records adequately address the requirements of paragraphs (c)(10) through (c)(12).
(d) *General reporting requirements.* (1) Notwithstanding the requirements in this paragraph or paragraph (e) of this section, and except as provided in §63.16, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).
(2) *Reporting results of performance tests.* Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under §63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h).
(3) *Reporting results of opacity or visible emission observations.* The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the opacity or visible emission results (produced using Test Method 9 or Test Method 22, or an alternative to these test methods) along with the results of the performance test required under §63.7. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under §63.7, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.
(4) *Progress reports.* The owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.
(5)(i) *Periodic startup, shutdown, and malfunction reports.* If actions taken by an owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (see §63.6(e)(3)), the owner or operator shall state such information in a startup, shutdown, and malfunction report. Actions taken to minimize emissions during such startups, shutdowns, and malfunctions shall be summarized in the report and may be done in checklist form; if actions taken are the same for each event, only one checklist is necessary. Such a report shall also 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. Reports shall only be required if a startup or shutdown caused the source to exceed any applicable emission limitation in the relevant emission standards, or if a malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and

continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

(ii) *Immediate startup, shutdown, and malfunction reports.* Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup or shutdown that caused the source to exceed any applicable emission limitation in the relevant emission standards, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph (d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions in conformance with §63.6(e)(1)(i). Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph (d)(5)(ii) are specified in §63.9(i).

(e) *Additional reporting requirements for sources with continuous monitoring systems* —(1) *General.* When more than one CEMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CEMS.

(2) *Reporting results of continuous monitoring system performance evaluations.* (i) The owner or operator of an affected source required to install a CMS by a relevant standard shall furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as required under §63.8(e), simultaneously with the results of the performance test required under §63.7, unless otherwise specified in the relevant standard.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation conducted under §63.8(e). The copies shall be furnished at least 15 calendar days before the performance test required under §63.7 is conducted.

(3) *Excess emissions and continuous monitoring system performance report and summary report.* (i) Excess emissions and parameter monitoring exceedances are defined in relevant standards. The owner or operator of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Administrator semiannually, except when—

(A) More frequent reporting is specifically required by a relevant standard;

(B) The Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(C) [Reserved]

(D) The affected source is complying with the Performance Track Provisions of §63.16, which allows less frequent reporting.

(ii) *Request to reduce frequency of excess emissions and continuous monitoring system performance reports.* Notwithstanding the frequency of reporting requirements specified in paragraph (e)(3)(i) of this section, an owner or operator who is required by a relevant standard to submit excess emissions and continuous monitoring system performance (and summary) reports on a quarterly (or more frequent)

basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
(A) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected source's excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance with the relevant standard;
(B) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the relevant standard; and
(C) The Administrator does not object to a reduced frequency of reporting for the affected source, as provided in paragraph (e)(3)(iii) of this section.
(iii) The frequency of reporting of excess emissions and continuous monitoring system performance (and summary) reports required to comply with a relevant standard may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the 5-year recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
(iv) As soon as CMS data indicate that the source is not in compliance with any emission limitation or operating parameter specified in the relevant standard, the frequency of reporting shall revert to the frequency specified in the relevant standard, and the owner or operator shall submit an excess emissions and continuous monitoring system performance (and summary) report for the noncomplying emission points at the next appropriate reporting period following the noncomplying event. After demonstrating ongoing compliance with the relevant standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard, as provided for in paragraphs (e)(3)(ii) and (e)(3)(iii) of this section.
(v) *Content and submittal dates for excess emissions and monitoring system performance reports.* All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of this section, in §63.8(c)(7) and §63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.
(vi) *Summary report.* As required under paragraphs (e)(3)(vii) and (e)(3)(viii) of this section, one summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). The summary report shall be entitled "Summary Report—Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and shall contain the following information:
(A) The company name and address of the affected source;
(B) An identification of each hazardous air pollutant monitored at the affected source;
(C) The beginning and ending dates of the reporting period;
(D) A brief description of the process units;
(E) The emission and operating parameter limitations specified in the relevant standard(s);
(F) The monitoring equipment manufacturer(s) and model number(s);
(G) The date of the latest CMS certification or audit;
(H) The total operating time of the affected source during the reporting period;

(I) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;
(J) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS 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;
(K) A description of any changes in CMS, processes, or controls since the last reporting period;
(L) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
(M) The date of the report.
(vii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator.
(viii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.
(4) *Reporting continuous opacity monitoring system data produced during a performance test.* The owner or operator of an affected source required to use a COMS shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results. The report of COMS data shall be submitted simultaneously with the report of the performance test results required in paragraph (d)(2) of this section.
(f) *Waiver of recordkeeping or reporting requirements.* (1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.
(2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.
(3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under §63.6(i), any required compliance progress report or compliance status report required under this part (such as under §63.6(i) and §63.9(h)) or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.
(4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she—
(i) Approves or denies an extension of compliance; or
(ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or
(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.
(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.

(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.
[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16604, Apr. 5, 2002; 68 FR 32601, May 30, 2003; 69 FR 21752, Apr. 22, 2004; 71 FR 20455, Apr. 20, 2006]

§ 63.11 Control device and work practice requirements.

(a) *Applicability.* (1) The applicability of this section is set out in §63.1(a)(4).
(2) This section contains requirements for control devices used to comply with applicable subparts of this part. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.
(3) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A–7, Method 21 monitor.
(b) *Flares.* (1) Owners or operators using flares to comply with the provisions of this part shall monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators using flares shall monitor these control devices.
(2) Flares shall be steam-assisted, air-assisted, or non-assisted.
(3) Flares shall be operated at all times when emissions may be vented to them.
(4) Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in appendix A of part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.
(5) Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
(6) An owner/operator has the choice of adhering to the heat content specifications in paragraph (b)(6)(ii) of this section, and the maximum tip velocity specifications in paragraph (b)(7) or (b)(8) of this section, or adhering to the requirements in paragraph (b)(6)(i) of this section.
(i)(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume) or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity V_{max}, as determined by the following equation:
$V_{max}=(X_{H2}-K_1)* K_2$
Where:
V_{max}=Maximum permitted velocity, m/sec.
K_1=Constant, 6.0 volume-percent hydrogen.
K_2=Constant, 3.9(m/sec)/volume-percent hydrogen.
X_{H2}=The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946–77. (Incorporated by reference as specified in §63.14).
(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (b)(7)(i) of this section.
(ii) Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 M/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K\sum_{i=1}^{n} C_i H_i$$

Where:
H_T=Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.
K=Constant=

$$1.740\times10^{-7}\left(\frac{1}{ppmv}\right)\left(\frac{\text{g-mole}}{\text{scm}}\right)\left(\frac{\text{MJ}}{\text{kcal}}\right)$$

where the standard temperature for (g-mole/scm) is 20 °C.

C_i=Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946–77 or 90 (Reapproved 1994) (incorporated by reference as specified in §63.14).

H_i=Net heat of combustion of sample component i, kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809–95 (incorporated by reference as specified in §63.14) if published values are not available or cannot be calculated.

n=Number of sample components.

(7)(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(7)(ii) and (b)(7)(iii) of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60 of this chapter, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, less than the velocity V_{max}, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max}, for flares complying with this paragraph shall be determined by the following equation:

$Log_{10}(V_{max})=(H_T+28.8)/31.7$

Where:

V_{max}=Maximum permitted velocity, m/sec.

28.8=Constant.

31.7=Constant.

H_T=The net heating value as determined in paragraph (b)(6) of this section.

(8) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity V_{max}. The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation:

$V_{max}=8.71+0.708(H_T)$

Where:

V_{max}=Maximum permitted velocity, m/sec.

8.71=Constant.

0.708=Constant.

H_T=The net heating value as determined in paragraph (b)(6)(ii) of this section.

(c) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (c), (d), and (e) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, appendix A–7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, sppendix A–7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (c), (d), and (e) of this section continue to apply. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (c)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (c), (d), and (e) of this section.

(1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, and 65 that requires monitoring of equipment with a 40 CFR part 60, appendix A–7, Method 21 monitor.

(2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, appendix A–7, Method 21 monitor.
(3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.
(4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.
(5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.
(6) *Leak* means:
(i) Any emissions imaged by the optical gas instrument;
(ii) Indications of liquids dripping;
(iii) Indications by a sensor that a seal or barrier fluid system has failed; or
(iv) Screening results using a 40 CFR part 60, appendix A–7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.
(d) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A–7, Method 21 monitor.
(1) An owner or operator of an affected source subject to 40 CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (e) of this section instead of using the 40 CFR part 60, appendix A–7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.
(2) Any leak detected when following the leak survey procedure in paragraph (e)(3) of this section must be identified for repair as required in the applicable subpart.
(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, Appendix A–7, Method 21 monitor at the leak definition required in the applicable subparts to which the equipment is subject.
(4) The schedule for repair is as required in the applicable subpart.
(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.
(6) When this alternative work practice is used for detecting leaking equipment, the following are not applicable for the equipment being monitored:
(i) Skip period leak detection and repair;
(ii) Quality improvement plans; or
(iii) Complying with standards for allowable percentage of valves and pumps to leak.
(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (d)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, Appendix A–7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.
(e) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (e)(1) through (e)(5) of this section.
(1) *Instrument specifications.* The optical gas imaging instrument must comply with the requirements specified in paragraphs (e)(1)(i) and (e)(1)(ii) of this section.
(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (e)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.
(ii) Provide a date and time stamp for video records of every monitoring event.
(2) *Daily instrument check.* On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (e)(2)(i) of this section in

accordance with the procedure specified in paragraphs (e)(2)(ii) through (e)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (e)(2)(v) of this section.
(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (e)(2)(i)(A) and (e)(2)(i)(B) of this section.
(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (e)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.
(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (e)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

$$E_{dic} = (E_{sds}) \sum_{i=1}^{k} x_i$$

Where:
E_{dic}= Mass flow rate for the daily instrument check, grams per hour
x_i= Mass fraction of detectable chemical(s) i seen by the optical gas imaging instrument, within the distance to be used in paragraph (e)(2)(iv)(B) of this section, at or below the standard detection sensitivity level, E_{sds}.
E_{sds}= Standard detection sensitivity level from Table 1 to subpart A, grams per hour
k = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.
(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.
(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.
(iv) Establish a mass flow rate by using the following procedures:
(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.
(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.
(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate calculated in paragraph (e)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.
(v) Repeat the procedures specified in paragraphs (e)(2)(ii) through (e)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.
(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under §63.177 or §63.178, whichever is applicable.
(3) *Leak survey procedure.* Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.
(4) *Recordkeeping.* Keep the records described in paragraphs (e)(4)(i) through (e)(4)(vii) of this section:
(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.
(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.
(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (e)(2)(i)(A) of this section.
(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (e)(2)(i)(B) of this section.

(v) The daily instrument check. Record the distance, per paragraph (e)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (e)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.
(vi) *Recordkeeping requirements in the applicable subpart.* A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.
(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subparts.
(5) *Reporting.* Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to *CCG-AWP@EPA.GOV.*
[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 24444, May 4, 1998; 65 FR 62215, Oct. 17, 2000; 67 FR 16605, Apr. 5, 2002; 73 FR 78211, Dec. 22, 2008]

§ 63.12 State authority and delegations.

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from—
(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;
(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or
(3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.
(b)(1) Section 112(l) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards and other requirements pursuant to section 112 for stationary sources located in that State. Because of the unique nature of radioactive material, delegation of authority to implement and enforce standards that control radionuclides may require separate approval.
(2) Subpart E of this part establishes procedures consistent with section 112(l) for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. Subpart E also establishes procedures for the review and withdrawal of section 112 implementation and enforcement authorities granted through a section 112(l) approval.
(c) All information required to be submitted to the EPA under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain Federal or State reporting requirement. The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to the EPA and the State agency.

§ 63.13 Addresses of State air pollution control agencies and EPA Regional Offices.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated in the following list of EPA Regional Offices.
EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Office of Ecosystem Protection, 5 Post Office Square—Suite 100, Boston, MA 02109–3912.

EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, 26 Federal Plaza, New York, NY 10278.
EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, 1650 Arch Street, Philadelphia, PA 19103.
EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Director, Air, Pesticides and Toxics Management Division, Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303–3104.
EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604–3507.
EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas), Director, Air, Pesticides and Toxics, 1445 Ross Avenue, Dallas, TX 75202–2733.
EPA Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air, RCRA, and Toxics Division, U.S. Environmental Protection Agency, 901 N. 5th Street, Kansas City, KS 66101.
EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Mail Code 8ENF–AT, 1595 Wynkoop Street, Denver, CO 80202–1129.
EPA Region IX (Arizona, California, Hawaii, Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau), Director, Air Division, 75 Hawthorne Street, San Francisco, CA 94105.
EPA Region X (Alaska, Idaho, Oregon, Washington), Director, Office of Air Quality, 1200 Sixth Avenue (OAQ–107), Seattle, WA 98101.
(b) All information required to be submitted to the Administrator under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act. The owner or operator of an affected source may contact the appropriate EPA Regional Office for the mailing addresses for those States whose delegation requests have been approved.
(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.
[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 66061, Dec. 1, 1998; 67 FR 4184, Jan. 29, 2002; 68 FR 32601, May 30, 2003; 68 FR 35792, June 17, 2003; 73 FR 24871, May 6, 2008; 75 FR 69532, Nov. 12, 2010; 76 FR 49673, Aug. 11, 2011]

§ 63.14 Incorporations by reference.

Link to an amendment published at 76 FR 15662, Mar. 21, 2011.
Link to a delay published at 76 FR 28664, May 18, 2011.
(a) The materials listed in this section are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of the approval, and notice of any change in these materials will be published in theFederal Register.The materials are available for purchase at the corresponding addresses noted below, and all are available for inspection at the National Archives and Records Administration (NARA), at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M St., SW., Washington, DC, and at the EPA Library (MD–35), U.S. EPA, Research Triangle Park, North Carolina. For information on the availability of this material at NARA, call 202–741–6030, or go to:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.
(b) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959; or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106.
(1) ASTM D523–89, Standard Test Method for Specular Gloss, IBR approved for §63.782.

(2) ASTM D1193–77, 91, Standard Specification for Reagent Water, IBR approved for appendix A: Method 306, Sections 7.1.1 and 7.4.2.
(3) ASTM D1331–89, Standard Test Methods for Surface and Interfacial Tension of Solutions of Surface Active Agents, IBR approved for appendix A: Method 306B, Sections 6.2, 11.1, and 12.2.2.
(4) ASTM D1475–90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for §63.788, appendix A.
(5) ASTM D1946–77, 90, 94, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §63.11(b)(6).
(6) ASTM D2369–93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved for §63.788, appendix A.
(7) ASTM D2382–76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §63.11(b)(6).
(8) ASTM D2879–83, Standard Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved 1983, IBR approved for §§63.111, 63.2406, and 63.12005.
(9) ASTM D3257–93, Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography, IBR approved for §63.786(b).
(10) ASTM 3695–88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography, IBR approved for §63.365(e)(1) of subpart O.
(11) ASTM D3792–91, Standard Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for §63.788, appendix A.
(12) ASTM D3912–80, Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for §63.782.
(13) ASTM D4017–90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for §63.788, appendix A.
(14) ASTM D4082–89, Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants, IBR approved for §63.782.
(15) ASTM D4256–89, 94, Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for §63.782.
(16) ASTM D4809–95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §63.11(b)(6).
(17) ASTM E180–93, Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals, IBR approved for §63.786(b).
(18) ASTM E260–91, 96, General Practice for Packed Column Gas Chromatography, IBR approved for §§63.750(b)(2) and 63.786(b)(5).
(19) ASTM D95–05 (Reapproved 2010), Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation, approved May 1, 2010, IBR approved for §63.10005(i)(4)(i).
(20) ASTM Method D388–05, Standard Classification of Coals by Rank, approved September 15, 2005, IBR approved for §63.10042.
(21) ASTM D2099–00, Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Maeser Water Penetration Tester, IBR approved for §63.5350.
(22) ASTM Method D396–10, Standard Specification for Fuel Oils, including Appendix X1, approved October 1, 2010, IBR approved for §63.10042.
(23) ASTM D4006–11, Standard Test Method for Water in Crude Oil by Distillation, including Annex A1 and Appendix X1, approved June 1, 2011, IBR approved for §63.10005(i)(4)(ii).
(24) ASTM D2697–86 (Reapproved 1998), "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings," IBR approved for §§63.3161(f)(1), 63.3521(b)(1), 63.3941(b)(1), 63.4141(b)(1), 63.4741(b)(1), 63.4941(b)(1), and 63.5160(c).
(25) ASTM D6093–97 (Reapproved 2003), "Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer," IBR approved for §§63.3161(f)(1), 63.3521(b)(1), 63.3941(b)(1), 63.4141(b)(1), 63.4741(b)(1), 63.4941(b)(1), and 63.5160(c).
(26) ASTM D1475–98 (Reapproved 2003), "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products," IBR approved for §§63.3151(b), 63.3941(b)(4), 63.3941(c), 63.3951(c), 63.4141(b)(3), 63.4141(c), and 63.4551(c).

(27) ASTM D6522–00, 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, IBR approved for §63.9307(c)(2).
(28) ASTM D6420–99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectometry, approved 2004, IBR approved for §§60.485, 60.485a, 63.772, 63.2351, 63.2354, and table 8 to subpart HHHHHHH of this part.
(29) ASTM D6420–99, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for §§63.5799 and 63.5850.
(30) ASTM E 515–95 (Reapproved 2000), Standard Test Method for Leaks Using Bubble Emission Techniques, IBR approved for §63.425(i)(2).
(31) ASTM D5291–02, Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Petroleum Products and Lubricants, IBR approved for §63.3981, appendix A.
(32) ASTM D5965–02, "Standard Test Methods for Specific Gravity of Coating Powders," IBR approved for §§63.3151(b) and 63.3951(c).
(33) ASTM D6053–00, Standard Test Method for Determination of Volatile Organic Compound (VOC) Content of Electrical Insulating Varnishes, IBR approved for §63.3981, appendix A.
(34) E145–94 (Reapproved 2001), Standard Specification for Gravity-Convection and Forced-Ventilation Ovens, IBR approved for §63.4581, appendix A.
(35) ASTM D6784–02 (Reapproved 2008) Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), approved April 1, 2008, IBR approved for table 1 to subpart DDDDD of this part, table 2 to subpart DDDDD of this part, table 5 to subpart DDDDD, table 12 to subpart DDDDD of this part, and table 4 to subpart JJJJJJ of this part.
(36) ASTM D5066–91 (Reapproved 2001), "Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis," IBR approved for §63.3161(g).
(37) ASTM 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)," IBR approved for §§63.3165(e) and 63.3176, appendix A.
(38) ASTM 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)," IBR approved for §63.3165(e).
(39) ASTM Method D388–05, Standard Classification of Coals by Rank, approved September 15, 2005, IBR approved for §63.7575 and §63.11237.
(40) ASTM D396–10 Standard Specification for Fuel Oils, approved October 1, 2010, IBR approved for §63.7575.
(41) ASTM Method D1835–05, Standard Specification for Liquefied Petroleum (LP) Gases, approved April 1, 2005, IBR approved for §63.7575 and §63.11237.
(42) ASTM D2013/D2013M–09 Standard Practice for Preparing Coal Samples for Analysis, approved November 1, 2009, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(43) ASTM D2234/D2234M–10 Standard Practice for Collection of a Gross Sample of Coal, approved January 1, 2010, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(44) ASTM D3173–03 (Reapproved 2008) Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, approved February 1, 2008, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(45) ASTM D2879–96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved 1996, IBR approved for §§63.111, 63.2406, and 63.12005.
(46) [Reserved]
(47) ASTM D5198–09 Standard Practice for Nitric Acid Digestion of Solid Waste, approved February 1, 2009, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(48) ASTM D5865–10a Standard Test Method for Gross Calorific Value of Coal and Coke, approved May 1, 2010, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.

(49) ASTM D6323–98 (Reapproved 2003), Standard Guide for Laboratory Subsampling of Media Related to Waste Management Activities, approved August 10, 2003, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(50) ASTM E711–87 (Reapproved 2004) Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter, approved August 28, 1987, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(51) ASTM E776–87 (Reapproved 2009) Standard Test Method for Forms of Chlorine in Refuse-Derived Fuel, approved July 1, 2009, IBR approved for table 6 to subpart DDDDD of this part.
(52) ASTM E871–82 (Reapproved 2006) Standard Test Method for Moisture Analysis of Particulate Wood Fuels, approved November 1, 2006, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(53) ASTM E885–88 (Reapproved 1996), Standard Test Methods for Analyses of Metals in Refuse-Derived Fuel by Atomic Absorption Spectroscopy,[1] IBR approved for table 6 to subpart DDDDD of this part 63.
(54) ASTM D6348–03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, approved 2003, IBR approved for §63.1349, table 4 to subpart DDDD of this part, and table 8 to subpart HHHHHHH of this part.
(55)–(56) [Reserved]
(57) ASTM D6721–01 (Reapproved 2006) Standard Test Method for Determination of Chlorine in Coal by Oxidative Hydrolysis Microcoulometry, approved April 1, 2006, IBR approved for table 6 to subpart DDDDD of this part.
(58)–(60) [Reserved]
(61) ASTM D6722–01 (Reapproved 2006) Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by the Direct Combustion Analysis, approved April 1, 2006, IBR approved for Table 6 to subpart DDDDD and Table 5 to subpart JJJJJJ of this part.
(62) [Reserved]
(63) ASTM D2216–05, "Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass," IBR approved for the definition of "Free organic liquids" in §63.10692.
(64) ASTM D6522–00 (Reapproved 2005), 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, approved October 1, 2005, IBR approved for table 4 to subpart ZZZZ of this part, table 5 to subpart DDDDD of this part, and table 4 to subpart JJJJJJ of this part.
(65) ASTM D 5228–92—"Standard Test Method for Determination of Butane Working Capacity of Activated Carbon," reapproved 2005, IBR approved for §63.11092(b)(1)(i)(B)(*1*)(*ii*).
(66) ASTM D6784–02 (Reapproved 2008), Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), approved April 1, 2008, IBR approved for §63.11646(a)(1)(vi), §63.11647(a)(1)(ii), §63.11647(a)(3)(ii), and §63.11647(d).
(67) ASTM D5954–98 (Reapproved 2006), Test Method for Mercury Sampling and Measurement in Natural Gas by Atomic Absorption Spectroscopy, approved December 1, 2006, IBR approved for table 6 to subpart DDDDD of this part.
(68) ASTM D6350–98 (Reapproved 2003) Standard Test Method for Mercury Sampling and Analysis in Natural Gas by Atomic Fluorescence Spectroscopy, approved May 10, 2003, IBR approved for table 6 to subpart DDDDD of this part.
(69) ASTM D4057–06 (Reapproved 2011), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, including Annex A1, approved June 1, 2011, IBR approved for §63.10005(i)(4)(iv).
(70) ASTM D4177–95 (Reapproved 2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, including Annexes A1 through A6 and Appendices X1 and X2, approved May 1, 2010, IBR approved for §63.10005(i)(4)(iii).
(71) ASTM D6348–03 (Reapproved 2010), Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, including Annexes A1 through A8, approved October 1, 2010, IBR approved for table 1 to subpart UUUUU of this part, table 2 to subpart UUUUU of this part, table 5 to subpart UUUUU of this part, and appendix B to subpart UUUUU of this part.

(72) ASTM D6784–02 (Reapproved 2008), Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), approved April 1, 2008, IBR approved for table 5 to subpart UUUUU of this part, and appendix A to subpart UUUUU of this part.
(c) The materials listed below are available for purchase from the American Petroleum Institute (API), 1220 L Street, NW., Washington, DC 20005.
(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989, IBR approved for §63.111 and §63.2406.
(2) API Publication 2518, Evaporative Loss from Fixed-roof Tanks, Second Edition, October 1991, IBR approved for §63.150(g)(3)(i)(C) of subpart G of this part.
(3) API Manual of Petroleum Measurement Specifications (MPMS) Chapter 19.2 (API MPMS 19.2), Evaporative Loss From Floating-Roof Tanks (formerly API Publications 2517 and 2519), First Edition, April 1997, IBR approved for §§63.1251 and 63.12005.
(d) *State and Local Requirements.* The following materials listed below are available at the Air and Radiation Docket and Information Center, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, telephone number (202) 566–1745.
(1) *California Regulatory Requirements Applicable to the Air Toxics Program,* November 16, 2010, IBR approved for §63.99(a)(5)(ii) of subpart E of this part.
(2) New Jersey's *Toxic Catastrophe Prevention Act Program,* (July 20, 1998), Incorporation By Reference approved for §63.99 (a)(30)(i) of subpart E of this part.
(3)(i) Letter of June 7, 1999 to the U.S. Environmental Protection Agency Region 3 from the Delaware Department of Natural Resources and Environmental Control requesting formal full delegation to take over primary responsibility for implementation and enforcement of the Chemical Accident Prevention Program under Section 112(r) of the Clean Air Act Amendments of 1990.
(ii) Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management, Accidental Release Prevention Regulation, sections 1 through 5 and sections 7 through 14, effective January 11, 1999, IBR approved for §63.99(a)(8)(i) of subpart E of this part.
(iii) State of Delaware Regulations Governing the Control of Air Pollution (October 2000), IBR approved for §63.99(a)(8)(ii)–(v) of subpart E of this part.
(4) Massachusetts Department of Environmental Protection regulations at 310 CMR 7.26(10)–(16), Air Pollution Control, effective as of September 5, 2008, corrected March 6, 2009, and 310 CMR 70.00, Environmental Results Program Certification, effective as of December 28, 2007. Incorporation By Reference approved for §63.99(a)(22)(ii) of subpart E of this part.
(5)(i) New Hampshire Regulations Applicable to Hazardous Air Pollutants, March, 2003. Incorporation by Reference approved for §63.99(a)(29)(iii) of subpart E of this part.
(ii) New Hampshire Regulations Applicable to Hazardous Air Pollutants, September 2006. Incorporation by Reference approved for §63.99(a)(29)(iv) of subpart E of this part.
(6) Maine Department of Environmental Protection regulations at Chapter 125, Perchloroethylene Dry Cleaner Regulation, effective as of June 2, 1991, last amended on June 24, 2009. Incorporation By Reference approved for §63.99(a)(20)(iii) of subpart E of this part.
(7) California South Coast Air Quality Management District's “Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989,” IBR approved for §63.11173(e) and §63.11516(d).
(8) California South Coast Air Quality Management District's “Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002,” Revision 0, IBR approved for §§63.11173(e) and 63.11516(d).
(9) Rhode Island Department of Environmental Management regulations at Air Pollution Control Regulation No. 36, Control of Emissions from Organic Solvent Cleaning, effective April 8, 1996, last amended October 9, 2008, and Rhode Island Air Pollution Control, General Definitions Regulation, effective July 19, 2007, last amended October 9, 2008. Incorporation By Reference approved for §63.99(a)(40)(ii) of subpart E of this part.
(e) The materials listed below are available for purchase from the National Institute of Standards and Technology, Springfield, VA 22161, (800) 553–6847.
(1) Handbook 44, Specificiations, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998, IBR approved for §63.1303(e)(3).
(2) [Reserved]

(f) The following material is available from the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P.O. Box 133318, Research Triangle Park, NC 27709–3318 or at *http://www.ncasi.org.*
(1) NCASI Method DI/MEOH–94.02, Methanol in Process Liquids GC/FID (Gas Chromatography/Flame Ionization Detection), August 1998, Methods Manual, NCASI, Research Triangle Park, NC, IBR approved for §63.457(c)(3)(ii) of subpart S of this part.
(2) NCASI Method CI/WP–98.01, Chilled Impinger Method For Use At Wood Products Mills to Measure Formaldehyde, Methanol, and Phenol, 1998, Methods Manual, NCASI, Research Triangle Park, NC, IBR approved for table 4 to subpart DDDD of this part.
(3) NCASI Method IM/CAN/WP–99.02, Impinger/Canister Source Sampling Method for Selected HAPs and Other Compounds at Wood Products Facilities, January 2004, Methods Manual, NCASI, Research Triangle Park, NC, IBR approved for table 4 to subpart DDDD of this part.
(4) NCASI Method ISS/FP A105.01, Impinger Source Sampling Method for Selected Aldehydes, Ketones, and Polar Compounds, December 2005, Methods Manual, NCASI, Research Triangle Park, NC, IBR approved for table 4 to subpart DDDD of this part.
(g) The materials listed below are available for purchase from AOAC International, Customer Services, Suite 400, 2200 Wilson Boulevard, Arlington, Virginia, 22201–3301, Telephone (703) 522–3032, Fax (703) 522–5468.
(1) AOAC Official Method 978.01 Phosphorus (Total) in Fertilizers, Automated Method, Sixteenth edition, 1995, IBR approved for §63.626(d)(3)(vi).
(2) AOAC Official Method 969.02 Phosphorus (Total) in Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for §63.626(d)(3)(vi).
(3) AOAC Official Method 962.02 Phosphorus (Total) in Fertilizers, Gravimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for §63.626(d)(3)(vi).
(4) AOAC Official Method 957.02 Phosphorus (Total) in Fertilizers, Preparation of Sample Solution, Sixteenth edition, 1995, IBR approved for §63.626(d)(3)(vi).
(5) AOAC Official Method 929.01 Sampling of Solid Fertilizers, Sixteenth edition, 1995, IBR approved for §63.626(d)(3)(vi).
(6) AOAC Official Method 929.02 Preparation of Fertilizer Sample, Sixteenth edition, 1995, IBR approved for §63.626(d)(3)(vi).
(7) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizers, Spectrophotometric Molybdovanadophosphate Method, Sixteenth edition, 1995, IBR approved for §63.626(d)(3)(vi).
(h) The materials listed below are available for purchase from The Association of Florida Phosphate Chemists, P.O. Box 1645, Bartow, Florida, 33830, Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists, Seventh Edition 1991, IBR.
(1) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample, IBR approved for §63.606(c)(3)(ii) and §63.626(c)(3)(ii).
(2) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus—P_2O_5or $Ca_3(PO_4)_2$, Method A-Volumetric Method, IBR approved for §63.606(c)(3)(ii) and §63.626(c)(3)(ii).
(3) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5or $Ca_3(PO_4)_2$, Method B—Gravimetric Quimociac Method, IBR approved for §63.606(c)(3)(ii) and §63.626(c)(3)(ii).
(4) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P_2O_5or $Ca_3(PO_4)_2$, Method C—Spectrophotometric Method, IBR approved for §63.606(c)(3)(ii) and §63.626(c)(3)(ii).
(5) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method A—Volumetric Method, IBR approved for §63.606(c)(3)(ii), §63.626(c)(3)(ii), and §63.626(d)(3)(v).
(6) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method B—Gravimetric Quimociac Method, IBR approved for §63.606(c)(3)(ii), §63.626(c)(3)(ii), and §63.626(d)(3)(v).
(7) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method C—Spectrophotometric Method, IBR approved for §63.606(c)(3)(ii), §63.626(c)(3)(ii), and §63.626(d)(3)(v).
(i) The following materials are available for purchase from at least one of the following addresses: ASME International, Orders/Inquiries, P.O. Box 2900, Fairfield, NJ 07007–2900; or Global Engineering Documents, Sales Department, 15 Inverness Way East, Englewood, CO 80112.

(1) ANSI/ASME PTC 19.10–1981, "Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]," IBR approved for §§63.309, 63.865, 63.3166, 63.3360, 63.3545, 63.3555, 63.4166, 63.4362, 63.4766, 63.4965, 63.5160, 63.9307, 63.9323, 63.11148, 63.11155, 63.11162, 63.11163, 63.11410, 63.11551, 63.11945, table 5 to subpart DDDDD of this part, table 1 to subpart ZZZZZ of this part, table 4 to subpart JJJJJ of this part, and table 5 to subpart UUUUU of this part.
(2) [Reserved]
(j) The following material is available for purchase from: British Standards Institute, 389 Chiswick High Road, London W4 4AL, United Kingdom.
(1) BS EN 1593:1999, Non-destructive Testing: Leak Testing—Bubble Emission Techniques, IBR approved for §63.425(i)(2).
(2) [Reserved]
(k) The following materials are available for purchase from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 605–6000 or (800) 553–6847; or for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512–1800:
(1) The following methods as published in the test methods compendium known as "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846, Third Edition. A suffix of "A" in the method number indicates revision one (the method has been revised once). A suffix of "B" in the method number indicates revision two (the method has been revised twice).
(i) Method 0023A, "Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofuran Emissions from Stationary Sources," dated December 1996, IBR approved for §63.1208(b)(1) of subpart EEE of this part.
(ii) Method 9071B, "n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples," dated April 1998, IBR approved for §63.7824(e) of subpart FFFFF of this part.
(iii) Method 9095A, "Paint Filter Liquids Test," dated December 1996, IBR approved for §§63.7700(b) and 63.7765 of subpart EEEEE of this part.
(iv) Method 9095B, "Paint Filter Liquids Test," (revision 2), dated November 2004, IBR approved for the definition of "Free organic liquids" in §63.10692, §63.10885(a)(1), and the definition of "Free liquids" in §63.10906.
(v) SW–846 Method 74741B, Revision 2, "Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique)" February 2007, IBR approved for §63.11647(f)(2).
(2) The following method as published in the National Institute of Occupational Safety and Health (NIOSH) test method compendium, "NIOSH Manual of Analytical Methods", NIOSH publication no. 94-113, Fourth Edition, August 15, 1994.
(i) NIOSH Method 2010, "Amines, Aliphatic," Issue 2, August 15, 1994, IBR approved for §63.7732(g)(1)(v) of subpart EEEEE of this part.
(ii) [Reserved]
(l) The following materials are available for purchase from the American Society of Heating, Refrigerating, and Air-Conditioning Engineers at 1791 Tullie Circle, NE., Atlanta, GA 30329 or by electronic mail at *orders@ashrae.org:*
(1) American Society of Heating, Refrigerating, and Air Conditioning Engineers Method 52.1, "Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992," IBR approved for §§63.11173(e) and 63.11516(d).
(2) [Reserved]
(m) The following materials are available from the California Air Resources Board, Engineering and Certification Branch, 1001 I Street, P.O. Box 2815, Sacramento, CA 95812–2815, Telephone (916) 327–0900 and are also available at the following Web site: *http://www.arb.ca.gov/vapor/vapor.htm.*
(1) California Air Resources Board Vapor Recovery Test Procedure TP–201.1.—"Volumetric Efficiency for Phase I Vapor Recovery Systems," adopted April 12, 1996, and amended February 1, 2001 and October 8, 2003, IBR approved for §63.11120(b)(1).
(2) California Air Resources Board Vapor Recovery Test Procedure TP–201.1E—"Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves," adopted October 8, 2003, IBR approved for §63.11120(a)(1)(i).

(3) California Air Resources Board Vapor Recovery Test Procedure TP–201.3—"Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities," adopted April 12, 1996 and amended March 17, 1999, IBR approved for §63.11120(a)(2)(i).
(n) The following material is available from the Texas Commission on Environmental Quality (TCEQ) Library, Post Office Box 13087, Austin, Texas 78711–3087, telephone number (512) 239–0028 or at *http://www.tceq.state.tx.us/assets/public/implementation/air/sip/sipdocs/2002-12-HGB/02046sipapp_ado.pdf* :
(1) "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" (Modified El Paso Method), Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, January 31, 2003, IBR approved for §§63.654 and 63.11920.
(2) [Reserved]
(o) The following material is available from the Bay Area Air Quality Management District (BAAQMD), 939 Ellis Street, San Francisco, California 94109, and is also available at the following Web site: *http://www.arb.ca.gov/DRDB/BA/CURHTML/ST/st30.pdf.*
(1) "BAAQMD Source Test Procedure ST–30—Static Pressure Integrity Test, Underground Storage Tanks," adopted November 30, 1983, and amended December 21, 1994, IBR approved for §63.11120(a)(2)(iii).
(2) [Reserved]
(p) The following material is available from the U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, (202) 272–0167, *http://www.epa.gov.*
(1) National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants—Background Information for Proposed Standards, Final Report, EPA–453/R–01–005, January 2001, IBR approved for §63.7491(g).
(2) Office Of Air Quality Planning And Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, EPA–454/R–98–015, September 1997, IBR approved for §§63.548(e)(4), 63.7525(j)(2), and 63.11224(f)(2).
(3) SW–846–3020A, Acid Digestion of Aqueous Samples And Extracts For Total Metals For Analysis By GFAA Spectroscopy, Revision 1, July 1992, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(4) SW–846–3050B, Acid Digestion of Sediments, Sludges, And Soils, Revision 2, December 1996, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(5) SW–846–7470A, Mercury In Liquid Waste (Manual Cold-Vapor Technique), Revision 1, September 1994, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(6) SW–846–7471B, Mercury In Solid Or Semisolid Waste (Manual Cold-Vapor Technique), Revision 2, February 2007, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD of this part and table 5 to subpart JJJJJJ of this part.
(7) SW–846–9250, Chloride (Colorimetric, Automated Ferricyanide AAI), Revision 0, September 1986, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD of this part.
(8) Method 8015C (SW–846–8015C), Nonhalogenated Organics by Gas Chromatography, Revision 3, February 2007, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§63.11960, 63.11980, and table 10 to subpart HHHHHHH of this part.
(9) Method 8260B (SW–846–8260B), Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 2, December 1996, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§63.11960, 63.11980, and table 10 to subpart HHHHHHH of this part.

(10) Method 8270D (SW–846–8270D), Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4, February 2007, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§63.11960, 63.11980, and table 10 to subpart HHHHHHH of this part.
(11) Method 8315A (SW–846–8315A), Determination of Carbonyl Compounds by High Performance Liquid Chromatography (HPLC), Revision 1, December 1996, in EPA Publication No. SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§63.11960, 63.11980, and table 10 to subpart HHHHHHH of this part.
(q) The following material is available for purchase from the 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.*
(1) ISO 6978–1:2003(E), Natural Gas—Determination of Mercury—Part 1: Sampling of Mercury by Chemisorption on Iodine, First edition, October 15, 2003, IBR approved for table 6 to subpart DDDDD of this part.
(2) ISO 6978–2:2003(E), Natural gas—Determination of Mercury—Part 2: Sampling of Mercury by Amalgamation on Gold/Platinum Alloy, First edition, October 15, 2003, IBR approved for table 6 to subpart DDDDD of this part.
[59 FR 12430, Mar. 16, 1994]

Editorial Notes: 1. ForFederal Registercitations affecting §63.14, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov* .
2. At 76 FR 15589, Mar. 21, 2011, §63.14 was amended by adding paragraph (b)(66), however, the amendment could not be incorporated because a paragraph (b)(66) already existed. For the convenience of the user, the added text is set forth as follows:

§ 63.14 Incorporation by reference.

(b) * * *
(66) ASTM D4084–07 Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), approved June 1, 2007, IBR approved for table 6 to subpart DDDDD of this part.

§ 63.15 Availability of information and confidentiality.

http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=f6794bef7a51d5176ccd8304c0b7e9a0&rgn=div5&view=text&node=40:10.0.1.1.1&idno=40 - PartTop
(a) *Availability of information.* (1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.
(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.
(b) *Confidentiality.* (1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.
(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

§ 63.16 Performance Track Provisions.

(a) Notwithstanding any other requirements in this part, an affected source at any major source or any area source at a Performance Track member facility, which is subject to regular periodic reporting under any subpart of this part, may submit such periodic reports at an interval that is twice the length of the regular period specified in the applicable subparts; provided, that for sources subject to permits under 40 CFR part 70 or 71 no interval so calculated for any report of the results of any required monitoring may be less frequent than once in every six months.

(b) Notwithstanding any other requirements in this part, the modifications of reporting requirements in paragraph (c) of this section apply to any major source at a Performance Track member facility which is subject to requirements under any of the subparts of this part and which has:

(1) Reduced its total HAP emissions to less than 25 tons per year;

(2) Reduced its emissions of each individual HAP to less than 10 tons per year; and

(3) Reduced emissions of all HAPs covered by each MACT standard to at least the level required for full compliance with the applicable emission standard.

(c) For affected sources at any area source at a Performance Track member facility and which meet the requirements of paragraph (b)(3) of this section, or for affected sources at any major source that meet the requirements of paragraph (b) of this section:

(1) If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using add-on control technology, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is meeting the emission standard by continuing to use that control technology. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(2) If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using pollution prevention, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions to levels at or below those required by the applicable emission standard. The affected source must maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(3) If the emission standard to which the affected source is subject is based on pollution prevention, and the affected source complies by using pollution prevention and reduces emissions by an additional 50 percent or greater than required by the applicable emission standard, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions by an additional 50 percent or greater than required by the applicable emission standard. The affected source must maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(4) Notwithstanding the provisions of paragraphs (c)(1) through (3), of this section, for sources subject to permits under 40 CFR part 70 or 71, the results of any required monitoring and recordkeeping must be reported not less frequently than once in every six months.

[69 FR 21753, Apr. 22, 2004]

Table 1 to Subpart A of Part 63—Detection Sensitivity Levels (grams per hour)

Monitoring frequency per subpart[a]	Detection sensitivity level
Bi-Monthly	60
Semi-Quarterly	85
Monthly	100

[a]When this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table, in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.

[73 FR 78213, Dec. 22, 2008]

ATTACHMENT C

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

$$\frac{\text{kilograms of VOC}}{\text{liter of applied solids}},$$

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) 0.17×350 ($^{0.160-R}{}_{T}$) 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:

$$M_o + M_d = \sum_{i=1}^{n} L_{ci} D_{ci} W_{oi} + \sum_{j=1}^{m} L_{dj} D_{dj}$$

[$_{\Sigma}L_{dj}D_{dj}$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:

$$T = \frac{\sum_{i=1}^{n} T_l V_{si} L_{cil}}{\sum_{l=1}^{p} L_s}$$

(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:

$$R_T = \frac{L_E}{L_E}, \text{ truncated after 3 decimal places.}$$

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:

$$\sum$$

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: $M_r=L_rD_r$

(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 progresss 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]

ATTACHMENT D

Title 40: Protection of Environment

Subpart IIII—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

Source: 69 FR 22623, April 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, April 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:

$$C_{avg,as} = \frac{\sum_{j=1}^{r} (Vol_{as,j})(D_{as,j})(W_{as,j})}{\sum_{j=1}^{r} (Vol_{as,j})(D_{as,j})} \qquad (Eq.\ 1)$$

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:

$$A = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad (Eq.\ 1A)$$

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:

$$H_{CSR} = (A_{CSR} + B_{CSR}) \left(\frac{R_V}{100} \right) \qquad (Eq.\ 4)$$

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.

$$H_{HAP} = H_{BC} - \sum_{i=1}^{q} \left(H_{C,i}\right) - \sum_{j=1}^{r} \left(H_{CSR,j}\right) - \sum_{k=1}^{q} \sum_{m=1}^{S_k} \left(H_{DEV,k,m}\right) \qquad (Eq.\ 6)$$

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:

$$H_{rate} = \left(H_{HAP}\right)/\left(V_{sdep}\right) \qquad (Eq.\ 7)$$

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:

$$BDEV = \sum_{j=i}^{n}\left(VOL_{TDEV,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad (Eq.\ 8B)$$

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, April 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:

$$CE = \frac{(TVH_{used} - TVH_{uncaptured})}{TVH_{used}} \times 100 \qquad (Eq.\ 2)$$

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.)

$$CE_i = (P_{v,i})(V_{sdep,i})(100)/(VOC_i) \qquad (Eq. 4)$$

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:

$$V_{sdep,i} = (V_{s,i})(TE_{c,i}) \qquad (Eq. 5)$$

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:

$$VOC_i = (D_{c,i})(Wvoc_{c,i}) \qquad (Eq. 6)$$

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	i. Maintaining an up-to-date inspection maintenance plan, records of annual

	§63.3167(b)(4)	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 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	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 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	Yes	

Citation	Subject	Applicable to subpart IIII	Explanation
	Construction/Reconstruction		
§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—Applicability	Yes	
§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).

Citation	Subject	Applicable to subpart IIII	Explanation
§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	No	Section 63.3120 requires reporting of

Citation	Subject	Applicable to subpart IIII	Explanation
	Reporting		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

Citation	Subject	Applicable to subpart IIII	Explanation
			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.

$$CE_i = \left(CE_{zone,i}\right)\left(V_{zone,i}\right)/\left(V_{booth,i}\right) \qquad S(Eq.\ A\text{-}6)$$

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.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Part 70 Operating Permit Renewal

Source Name:	Subaru of Indiana Automotive, Inc.
Source Location:	5500 State Road 38 East, Lafayette, IN 47905
County:	Tippecanoe
SIC Code:	3711
Operation Permit No.:	157-27048-00050
Operation Permit Issuance Date:	August 8, 2011
PSD/SSM No.:	157-31885-00050
SPM No.:	157-31887-00050
Permit Reviewer:	Aida De Guzman

On August 31, 2012, the Office of Air Quality (OAQ) had a notice published in the Journal and Courier in Lafayette, Indiana stating that Subaru of Indiana Automotive, Inc. applied for a PSD/Significant Source Modification and a Significant Permit Modification. The notice also stated that OAQ proposed to issue the permits and provided information on how the public could review the proposed permits and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not these permits should be issued as proposed.

On September 21, 2011, U.S. EPA, Region 5 made the following comments to the draft permits. Additions are **bolded** and deletions are ~~struck-through~~ for emphasis:

Comments to the Draft PSD/SSM and SPM

Comment 1

The proposed project is subject to PSD requirements for volatile organic compounds (VOCs) under 326 IAC 2-2. As a result, a best available control technology (BACT) analysis is required to determine the control technology best suited for controlling VOCs. In the VOC BACT analysis, included as Appendix C to the permit, carbon adsorption is eliminated as BACT because it is technically infeasible "by itself." Please explain what is meant by the use of "by itself" in the BACT analysis. If carbon adsorption is technically feasible in conjunction with other control technologies, please update the VOC BACT analysis to reflect this and determine whether carbon adsorption in combination with other technologies would constitute BACT for VOCs.

Response 1:

Carbon adsorption can be a technically feasible technology for the control of VOC emissions from surface coating operations, such as those employed by SIA, when it is combined with a subsequent thermal or catalytic oxidation process to actually destroy the adsorbed VOCs. The combination of an oxidation process for VOC destruction with a preliminary carbon adsorption process phase largely (though not entirely) resolves the technical deficiencies plaguing carbon adsorption if proposed as the sole control technology. Such a combined carbon adsorption and oxidation control system was addressed in the BACT analysis (in Appendix C of the TSD) with respect to its typical commercial form described as a volume/rotary concentrator. However, even such a combined carbon adsorption and thermal/catalytic oxidation system is not technically feasible in regards to VOC emissions from the ED Coating Dip/Rinse Tanks and Oven operations because of the low exhaust gas flow rates, low VOC concentrations found in the exhaust gas streams and variability of the VOCs present in that exhaust gas stream. Feasibility to the PVC coating system, as well as Black and Wax Coating operations, have technical issues related to the ability to concentrate exhaust air through booth air recirculation in areas occupied by humans. The ability to concentrate exhaust air streams are better suited for automatic spray zones of the topcoat system such as those found in a clearcoat spray booth. Even if the combined technology of the Volume/Rotary Concentrator were technically feasible for these applications, it very definitely would be cost prohibitive. It may have been confusing that this technology was evaluated for cost effectiveness in Step 4 of the BACT analysis under the name of Regenerative Thermal Oxidation System. While all add-on controls evaluated in Step 4 were shown to be cost prohibitive, the economic analysis showed this technology to have the highest cost per ton of VOC destroyed of any of the add-on control technologies.

Comment 2:

Compliance with VOC emission rate limits established in Condition D.4.4(a) is determined via Condition D.4.4(b) through the use of an equation. However, Condition D.4.4(b) refers to two equations, of which one is missing. Condition D.4.9 contains an equation that can be used to show compliance with VOC emission limits. Please add to Condition D.4.4(b) the equation used to determine compliance with the VOC emission rate limits or update the permit to show that the VOC emission rate is determined by the equation in Condition D.4.9.

Response 2:

IDEM, OAQ made changes to Condition D.4.4 to clarify this condition.

The Topcoat Booths and the Intermediate Coating Booths are subject to 326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operation). However, the source chose to comply with the equivalent VOC limitations in 326 IAC 8-1-2 allowed under this rule.

Compliance with the limits in Condition D.4.4(a) is determined by equation (a) in Condition D.4.9, which is stated in Condition D.4.9(a). Condition D.4.4(b) will likewise reference this equation in D.4.9.

D.4.4 Volatile Organic Compound (VOC) Limitations [326 IAC 8-2-2] **[326 IAC 8-1-2]**

(a) ~~Pursuant to 326 IAC 8-2-2,~~ **T**~~t~~he 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 ~~15.3~~ **15.1** 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.

(2) The daily VOC emissions from the Intermediate Coating Booth shall not exceed ~~15.3~~ **15.1** 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.

(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, 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 ~~with the following~~ **by the** equation **in D.4.9(a)**.

(c) Pursuant to 326 IAC 8-1-2(c), the overall efficiency of the incinerators (TC-1, TC-2, TUT, and SUR) shall **each** be no less than the equivalent overall efficiency calculated by the following equation:

$$\cancel{O = \frac{V - (E * TE)}{V} * 100}$$

$$\mathbf{O = \frac{(V - E)}{V} * 100}$$

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 = ~~326 IAC 8-2-2 emission limit in pounds of VOC per gallon of applied solids;~~ **Equivalent emission limit (15.1 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; and~~

O = Equivalent overall efficiency of the capture system and control device as a percentage.

~~(c) At this time, IDEM is collecting the coating information necessary to calculate the overall efficiency of the capture system and control device necessary to meet the limit above, pursuant to 326 IAC 8-1-2(c). Once this information is available, the OAQ will promptly reopen the permit using provisions of 326 IAC 2-7-9 (Permit Reopening) to include this information.~~

Comment 3:

Draft permit Condition D.4.4(c) states that information necessary to calculate the overall efficiency required to meet VOC emission rate limits is still being collected. Please explain whether the relevant information has yet been collected. If so, please update the permit to reflect the overall efficiency. Otherwise, please explain when information sufficient to determine the overall efficiency is expected to be collected and whether the overall efficiency calculated in Condition D.4.4(b) is still sufficient to ensure compliance with VOC emission rate limits.

Response 3:

Condition D.4.4(c) has been deleted, since this condition was a remnant from the original conditions established when the source was initially constructed. Please see **Response 2** for the changes.

Comment 4:

Conditions D.2.10(b) and D.3.10(b) state that the source shall determine the "three hourly average" thermal incinerator or oxidizer temperature from the most recent stack test that demonstrates compliance with the established VOC emission rate limits. The condition, as written, implies that there are three different one-hour average temperatures to be selected. However, conditions D.2.10(a) and D.3.10(a) require the source to take action when the temperature is below the single three-hour average determined from the most recent stack test. Please determine whether the temperature must be averaged over one hour or three hours and update conditions D.2.10 and D.3.10 accordingly.

Response 4:

Both Conditions D.2.10(b) and D.3.10(b) have typographical errors. These conditions must be consistent with the previous section (a) of each condition, which requires one 3-hour block average. Corrections have been made as follows:

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

(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~~ly~~ average temperature from the most recent valid stack test that demonstrates compliance with the limits of Condition D.2.1 as approved by IDEM.

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~~ly~~ 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.

Comment 5:

Condition D.2.13(a) requires the source to maintain six documents in order to document compliance with VOC PSD requirements. However, only four documents are listed. A similar issue also occurs in Condition D.4.16(a). Please ensure that the permit requires all applicable records to be kept to document compliance with VOC PSD requirements and update the permit as necessary to list these records.

Response 5:

This is a typographical error. Conditions D.2.13(a), D.4.16(a) and D.7.4(a) have been corrected as follows:

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 (~~6~~ **4**) below. Records maintained for (1) through (~~6~~ **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.

***

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 (~~7~~ **5**) below. Records maintained for (1) through (~~7~~ **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.

(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.

***

D.7.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.7.2, the Permittee shall maintain records in accordance with (1) through (~~4~~ **3**) below. Records maintained for (1) through (~~4~~ **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.

***

Comment 6:

Conditions D.2.6, D.3.7, D.4.9, D.5.4, and D.6.8 employ the use of sums to determine compliance with VOC emission limits. Please clarify in each permit condition that the sum is over all of the coatings used in each emission unit.

Response 6:

IDEM, OAQ has revised the compliance determination equations in Conditions D.2.6, D.3.7, D.4.9, D.5.4, and D.6.8 to clarify that the VOCs and solids volumes are summed for all coatings used in the emission unit that is subject to a particular emission limit listed in these permit conditions.

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:

VOC emissions (lb VOC/gal applied solids) = ~~[∑(C x U) / ∑(S x TE)] x [1 - (CE x DE)]~~

$$\mathbf{=[\sum_{i=1}^{n} (C_i)(U_i) / \sum_{i=1}^{n} (S_i \times TE)] \times [1 - (CE \times DE)]}$$

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; and
DE is the minimum destruction efficiency of the incinerator required in Condition D.2.1.

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):

VOC émissions (lb VOC/gal applied solids) = ~~[∑(C x U) / ∑(S x TE)] x [1- CE x DE)]~~

$$\mathbf{=[\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} (S_i \times TE)] \times [1 - (CE \times DE)]}$$

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; 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:

VOC emissions (lb VOC/gal coating less water) = ~~[∑ (C x U) / ∑ U] x [(1 - (CE x DE))]~~

$$\mathbf{= \left[\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} U \right] (x\ [1 - (CE \times DE)]}$$

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).

* * *

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

* * *

(2) Fascia Paint Line VOC = ~~∑ (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}))~~

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

Where:
$C_{\cancel{u}i}$ 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;
P_u is the purge solvent usage in gallon per unit;
P_c is the purge VOC content in pound per gallon;
DE is the destruction efficiency of the oxidizer; and
P_{cw} is the percent purge materials collected/captured for waste recycle.

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:

VOC emissions (lb VOC/gal coating less water) = ~~[∑ (C x U) / ∑ U]~~

$$\mathbf{\left[\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} U \right]}$$

Where:

C_i is the VOC content of the coating **($_i$)** in pounds of VOC per gallon of coating 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)

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):

VOC emissions (lb VOC/gal applied coating solids) = ~~[∑ (C x U) / ∑ U]~~

$$\mathbf{\left[\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} U \right]}$$

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:

VOC emissions (lb VOC/gal coating less water) = ~~[∑ (C x U) / ∑ U]~~

$$\mathbf{\left[\sum_{i=1}^{n} (C_i \times U_i) / \sum_{i=1}^{n} U \right]}$$

Where:

C_i is the VOC content of the coating **($_i$)** in pounds of VOC per gallon of coating 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)

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a PSD/Significant Source Modification and a Significant Permit Modification

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.:	157-31885-00050
Significant Permit Modification No.:	157-31887-00050
Permit Reviewer:	Aida DeGuzman

Existing Approvals

The source was issued its First Part 70 Operating Permit Renewal No. 157-27048-00050 on August 1, 2011 and no approval has since been issued.

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 June 15, 2004, for the 8-hour ozone standard.1
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for PM2.5.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) 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 NOx 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 NOx 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 $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective June 28, 2011. 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. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

Tippecanoe County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Automotive and light-duty truck assembly operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7. However, there is an applicable New Source Performance Standard that was in effect prior to August 7, 1980; therefore fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status

The table below summarizes the potential to emit of the entire source, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions** (ton/yr)
PM	23.1
PM_{10}	23.1
SO_2	<40
VOC	1,084.5
CO	<100
*NO_X	119.0
*GHG (CO2e)	143,669
Single HAP	>10
Total HAP	>25

* based on the sourcewide natural gas usage limit.

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because VOC, a regulated pollutant is emitted at a rate of 250 tons per year or more, emissions of GHGs are equal to or greater than one hundred thousand (100,000) tons of CO_2 equivalent (CO_2e) emissions per year, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is a major stationary source, under Part 70 Operating Permit Program (326 IAC 2-7), because VOC is emitted at a rate of 100 tons per year or more.

(c) These emissions are based upon the Technical Support Document for the most recent issued first TV Renewal T157-27048-00050, issued on August 1, 2011.

(e) 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.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Subaru of Indiana Automotive, Inc. (SIA) on May 16, 2012 relating to certain proposed changes to the SIA automobile assembly that will allow (i) the production of new vehicle styles and (ii) 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.

The following changes will allow higher vehicle production on an hourly basis so as to allow the plant to achieve its permitted annual production rate of 310,000 vehicles, which is unchanged, with less weekday overtime and/or weekend operations:

(a) Electrodeposition (ED) Paint System (Unit 001) - Increase vehicle holding/storage area. This change will not result in an increase in annual Potential to Emit (PTE). The change will fill in line gaps in subsequent operations that will allow an increase in more vehicles coated per hour, thus minimizing weekday overtime and weekend operations.

b) Sealer Deck (Unit 002 – Sealing and PVC Undercoating Line) - Physical change includes extending the conveyor system and installing four (4) additional spray coating application systems. The change will not result in an increase in annual PTE.

(c) PVC Coating Line (Unit 002 – Sealing and PVC Undercoating Line) - Physical change includes the installation of two (2) additional spray coating application systems. The intent of the change is to accommodate a higher line speed which will allow more vehicles to be coated on an hourly basis, thus minimizing weekday overtime and weekend operations.

(d) Intermediate (Surfacer) Coating Line (Unit 004) - The physical change includes alterations to the conveyor system to add storage capacity to fill in gaps in subsequent operations. The intent of the change is to accommodate a higher line speed which will allow more vehicles to be coated on an hourly basis, thus minimizing weekday overtime and weekend operations.

(e) Blackout and Wax Booth (Unit 006 – Anticorrosion Coating) - Physical change includes the installation of two (2) additional spray coating systems. The change will fill in line gaps in subsequent operations that will allow an increase in more vehicles coated hourly, thus minimizing weekday overtime and weekend operations.

(f) Trim Line (Unit 010) - Physical change includes increasing the line speed to allow more vehicles to be coated on an hourly basis, thus minimizing weekday overtime and/or weekend operations.

The following changes to SIA's plant are intended to: (i) support a new model to be produced at the plant; and (ii) otherwise generally support SIA's operations. These changes are not related to the goal of reducing weekday overtime and/or weekend operations.

(a) Body Shop - Expansion of body shop building to include a parts storage area and body shop processing area, including the following new emission units:

  (1) 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

  (2) MIG welding operations, with a maximum welding rod usage of 33,000 pounds per year.

For PSD aggregation purposes, the first group of proposed changes described above are considered to be a supplement to and continuation of the modification permitted in PSD/SSM No. 157-29566-00050, issued on December 22, 2010, since the primary purpose of the proposed changes is to allow SIA to achieve the production levels allowed under this 2010 PSD permit with reduced weekday overtime and/or weekend operations. Although these new changes were not considered essential at the time of the processing of the 2010 PSD permit, they are closely related to the objectives of the project authorized by the 2010 permit. The following describes the 2010 modification relating to increasing vehicle production of the plant from 262,000 vehicles per year to 310,000 vehicles per year:

The project components of the 2010 modification for increasing vehicle production of the plant from 262,000 vehicles per year to 310,000 vehicles per year are described as follows:

(a) Stamping Shop – The stamping shop involves the stamping of sheet metal using equipment capable of forming various components of a vehicle body (doors, roofs, fenders, hoods). The building is extended to accommodate the increase in production. This operation is listed as an insignificant activity. This operation emits particulate and the 2010 project will not change its insignificant classification.

(b) Body Shop – The body shop utilizes a variety of resistance welding and other equipment to merge the vehicle body components from the stamping shop to form the metal shell of the vehicle body. SIA proposed in the 2010 project to add storage capacity to the body shop in order to accommodate the increase in vehicle production. The 2010 project does not provide for physical modification to the existing equipment at the shop. This operation emits particulate and the 2010 project will not change its insignificant classification. The welding operation emits particulate and HAPs and the project will not change its insignificant classification.

(c) Paint Shop

(1) Electrodeposition Coating of Vehicle Bodies (ED Coating Line), identified as Unit 001 – This coating system uses waterborne technology with the oven controlled by a catalytic oxidation system. The 2010 project includes a physical change to the oven staging/cool down area. Vehicles that come out of the oven typically enter this staging area where they continue to cool prior to moving on to the sealer deck. The number of vehicles in this staging area is the basis for what can be processed through the subsequent operations of the primary paint system. The 2010 project increases the staging area to hold enough vehicles to support the requested increase in production volumes.

The 2010 project does not entail any physical changes to the ED system's dip/rinse tank or curing oven.

(2) The 2010 project provides for physical changes to the Two-tone and Repair Booth (part of the Topcoat Body Paint System) to allow for the application of waterborne basecoat and solventborne clearcoat materials. With these changes, the Two-tone Coating Line is to be referred to as Topcoat #3.

(3) Three (3) natural gas-fired heaters for the heated flash zone systems each with a maximum heat input capacity of 2.5 MMBtu/hr to provide additional paint curing for the waterborne materials to be utilized in the Two-tone and Bumper Systems.

(4) The 2010 project does not involve physical changes to the following operations although they will experience an increase in utilization as a result of the Project: Sealing and PVC Undercoating Line, ED Sand Operation, Intermediate (Surfacer) Coating Line, Blackout and Wax Operation, and the Plastic Fascia Coating Line.

(5) The 2010 project also entails a change to the Trim Line, identified as Unit 010, to Increase conveyor's line speed to support an increase in the number of assembled units per year.

(d) Engine Assembly Facility – the 2010 project involves changes to the buffer, storage and line speed.

(e) Miscellaneous Support Functions – The 2010 project does not involve any physical changes to various support functions, such as the paint mixing rooms, bulk storage tanks (i.e., gasoline tank, purge thinner tank and waste purge thinner tank), Purge Solvent Recovery Systems (excluding Plastic Bumper Paint Line System and Two-tone Systems, where changes will be made to utilize waterborne materials in these two paint line systems) to accommodate the increase in capacity. However, an increase in utilization of these support functions results from the 2010 project.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendixes A and B of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

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 reflects the PTE before controls of the new emission units included in the project and is used to determine the appropriate permit level under 326 IAC 2-7-10.5. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Table 1- PTE Before Controls of New Emission Units

Pollutant	**Potential To Emit** (ton/yr)
PM	0.2
PM_{10}	0.5
$PM_{2.5}$	0.5
SO_2	0.035
VOC	0.3
CO	5.0
NO_X	2.9
Single HAPs	0.097 (hexane)
Total HAPs	0.11

Appendix B of this TSD reflects the unrestricted potential emissions of the modification.

Table 2- PTE Change of the Modified Process

Pollutant	**PTE Before Modification** (ton/yr)	**PTE After Modification** (ton/yr)	**Increase from Modification** (ton/yr)
PM	1,159.8	1,405.5	245.7
PM_{10}	1,166.5	1,412.2	245.7
$PM_{2.5}$	1,166.5	1,412.2	245.7
SO_2	0.7	0.7	0.0
VOC	1,210.2	1,305.2	319.58
CO	100.0	100.0	0.0
NO_X	59.5	59.5	0.0
***Single HAP	2.14	2.14	0.0
***HAPs	2.25	2.25	0.0

PM is filterable only

PM10/PM2.5 is filterable plus condensible PM.
** - The -94.72 tons/yr from Unit 005 and -128.5 tons/yr from PFPL#2 have been adjusted to zeros (see detailed calculations on page 5 of 7 TSD App A), since this is not a netting procedure.
*** - The HAPs are from the natural gas combustion sources only. No data is available to calculate HAPs from the coatings.

Table 3 -Total PTE Increase due to the Modification

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	0.2	245.7	245.9
PM_{10}	0.5	245.7	246.2
$PM_{2.5}$	0.5	245.7	246.2
SO_2	0.035	0.0	0.035
VOC	0.3	319.58	319.9
CO	5.0	0.0	5.0
NO_X	2.9	0.0	2.9
Single HAP (hexane)	0.09	0.0	0.09
HAPs	0.11	0.0	0.11

$PM_{2.5}$ is not regulated under 326 IAC 2-7-10.5.

(a) This modification is subject to Significant Source Modification under 326 IAC 2-7-10.5(g)(1), because it is a modification subject to 326 IAC 2-2, Prevention of Significant Deterioration (PSD).

(b) This modification is subject to 326 IAC 2-7-12(d), Significant Permit Modification, because this modification involves significant changes to permit terms and conditions. Additionally, it involves case-by-case determinations of PSD BACT emission limits.

Permit Level Determination – PSD or Emission Offset or Nonattainment NSR

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 permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/Emission Unit	**PM**	**PM10**	**PM2.5**	**SO_2**	**VOC**	**CO**	**NO_X**	**GHG (CO_2e)**
PTE FROM NEW EMISSION UNITS (2012)								
Welding robots	0.03	0.03	0.03	0.0	0.0	0.0	0.0	22.5
Body Shop AHU	0.01	0.06	0.06	0.004	0.04	0.62	0.37	897
New Combustion Unit in 2010	**0.3**	**0.3**	**0.3**	**0.02**	**0.2**	**2.8**	**3.3**	**3,843**
TOTAL PTE	**0.34**	**0.39**	**0.39**	**0.024**	**0.24**	**2.62**	**3.67**	**4,762.5**

ACTUAL TO PROJECTED ACTUAL (ATPA) TEST								
Projected Actual Emissions from Combustion Sources	4.7	4.7	4.7	0.4	3.4	52.3	62.3	75,241

Process/Emission Unit	PM	PM10	PM2.5	SO_2	VOC	CO	NO_X	GHG (CO_2e)
Baseline Actual Emissions from Combustion Sources	2.7	2.7	2.7	0.2	2.0	29.9	35.6	42,965
Emissions Increase	***2.0***	***2.0***	***2.0***	***0.2***	***1.4***	***22.5***	***26.7***	***32,276***
ACTUAL TO PTE (ATP) TEST - MODIFIED AND INCREASED UTILIZATION								
BASELINE ACTUAL EMISSIONS (TONS/YEAR)								
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	6.7	6.7	6.7	-	11.95	-	-	-
Unit 002 - Sealing and PVC Undercoating Line				-	28.64	-	-	-
Unit 003 - Topcoat System (Topcoat 1)				-	81.1	-	-	-
Unit 003 - Topcoat System (Topcoat 2 and Topcoat 3)				-	108.65	-	-	-
Unit 004 - Intermediate (Surfacer) Coating Line				-	120.44	-	-	-
Unit 005 - Plastic Bumper Coating Line (PBL)				-	79.2	-	-	-
PFPLS#2 - Plastic Fascia Paint Line System				-	36.3	-	-	-
Unit 006 - Anticorrosion Coating				-	10.81	-	-	-
Unit 007 - Final Repair (Touchup) Painting				-	0.06	-	-	-
Unit 010 - Application of Adhesives				-	9.95	-	-	-
Storage Tanks				-	0.42	-	-	-
Unit 012 - Purge Solvent and Capture System				-	60.5			
Body Shop				-	-	-	-	-
TOTAL BASELINE	***6.7***	***6.7***	***6.7***	***-***	***550.5***	***-***	***-***	***-***
POST CHANGE PTE								
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	13.2	13.2	13.2	-	23.3	-	-	-
Unit 002 - Sealing and PVC Undercoating Line				-	86.0	-	-	-
Unit 003 - Topcoat System (Topcoat 1)				-	115.5	-	-	-

Process/Emission Unit	PM	PM10	PM2.5	SO_2	VOC	CO	NO_X	GHG (CO_2e)
Unit 003 - Topcoat System (Topcoat 2 and Topcoat 3)				-	277.5	-	-	-
Unit 004 - Intermediate (Surfacer) Coating Line				-	217	-	-	-
Unit 005 - Plastic Bumper Coating Line (PBL)				-	73.3	-	-	-
PFPLS#2 - Plastic Fascia Paint Line System				-	102.6	-	-	-
Unit 006 - Anticorrosion Coating				-	113.5	-	-	-
Unit 007 - Final Repair (Touchup) Painting				-	0.1	-	-	-
Unit 010 - Application of Adhesives				-	17.1	-	-	-
Storage Tanks				-	1.1	-	-	-
Unit 012- Purge Solvent and Capture System				-	54.3			
Body Shop				-	-	-	-	-
TOTAL POST CHANGE PTE	**13.2**	**13.2**	**13.2**	**-**	**1,084.5**	**-**	**-**	**-**
EMISSIONS INCREASE MODIFIED EMISSION UNITS (ATP)	**6.5**	**6.5**	**6.5**	**-**	**535**	**-**	**-**	**-**
TOTAL EMISSIONS INCREASE FROM PROJECT (HYBRID TEST)	**8.9**	**8.9**	**8.9**	**0.204**	**536.6**	**25.12**	**30.4**	**37,038**
PSD SIGNIFICANT LEVELS	**25**	**15**	**10**	**40**	**40**	**100**	**40**	**75,000**

*PM2.5 listed is direct PM2.5.
**Source-wide limit for PM/PM10/PM2.5.
Project - means the 2010 (PSD/SSM 157-29566-00050) and 2012 (PSD/SSM 157-31885-00050) modifications.

This table reflects the 2010 modification in PSD/SSM 157-29566-00050 and the proposed 2012 modification PSD/SSM 157-31885-00050 since both modifications were determined to be the same project for the purposes of NSR review.

Note: The Permittee has chosen to do an Actual to Projected Actual (ATPA) test for the existing combustion emission units and an Actual to PTE (ATP) test for the existing painting operations affected by the increase in production and coating lines speed.

Pursuant to the NSR Rule and 326 IAC 2-2, the Permittee shall monitor and keep records of the annual PM, PM10, SO2, CO and NOx emissions from the existing natural gas combustion units, since Actual to Projected Actual (ATPA) was performed for these emission units.

(a) This modification to an existing major stationary source is major because the VOC emissions increase is greater than the PSD significant level. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do apply.

The proposed 2012 enhancement project, by itself, would not be subject to 326 IAC 2-2, PSD. However, since it was determined to be part of and a continuation of the 2010 PSD project, it will, therefore, be subject to 326 IAC 2-2, PSD, with respect to VOC.

All the other pollutants are not emitted at or above the PSD significant levels.

Note: This project is subject to PSD only for VOC. The source will continue to comply with the same source-wide PM and PM10 limit of less than 23.1 tons/year.

(b) The new welding operation and 1.73 MMBtu/hr body shop natural gas-fired air supply unit and paint shop natural gas-fired air supply unit would not be subject to PSD for Green House Gases because the total CO_2 equivalent (CO_2e) emissions per year are less than 75,000 tons/year.

Federal Rule Applicability Determination

NSPS:

(a) This modification will not affect the New Source Performance Standards (NSPS), 326 IAC 12 and 40 CFR Part 60 applicability determinations already made to the emission units at the painting operation affected by this modification.

(b) There is no NSPS included in the permit for the new 1.73 MMBtu/hr body shop air supply unit and welding operation.

NESHAP:

(a) This modification will not affect the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14, 326 IAC 20 and 40 CFR Part 63 applicability determinations already made to the emission units affected by this modification.

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 proposed modification shows the change in the CAM previously determined for the following emission units under 40 CFR 64.1: `

CAM For VOC						
PTE Prior to Modification					**PTE After Modification**	
Part 70 Permit Emission Unit	**Component Emission Unit Description**	**Overall Control Efficiency**	**Tons/Year (Uncontrolled)**	**CAM Determination**	**Tons/Year (Uncontrolled)**	**CAM Determination**
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	ED Body Tank and Curing Oven	0.6	63	N	63.3	N
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	0.18	140.9	Y	140.9	Y
	Topcoat #2 Booth and Oven	0.18	339	Y	339	Y
	Two-tone and Repair/Topcoat #3 Booth and Oven*	Combined with Topcoat #2				
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth and Oven	0.18	264.6	Y	264.6	Y
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Booth and Oven	0.18	89	N	89	N
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Booth and Curing Oven	0.21	130.2	Y	130.2	Y
Unit 006 - Anticorrosion	Anticorrosion Booth	--	113.15	N	113.15	N (No VOC control employed)
Unit 007 - Final Repair (Touchup)	Final Repair (Touchup)	--	0.1	N	0.1	N
Unit 010 - Application of Adhesives	Application of Adhesives	--	17.05	N	17.05	N

CAM For VOC						
PTE Prior to Modification					**PTE After Modification**	
Part 70 Permit Emission Unit	**Component Emission Unit Description**	**Overall Control Efficiency**	**Tons/Year (Uncontrolled)**	**CAM Determination**	**Tons/Year (Uncontrolled)**	**CAM Determination**
Unit 012 - Purge Solvent Recovery System	Purge Solvent	--	54.3	N	54.3	N
Unit 011 - Three (3) Storage Tanks**	Storage Tanks	--	1.1 controlled	N	1.1 controlled	N
	Purge Thinner Storage Tank - 5,000 gallons	N/A	N/A	N/A	N/A	-
CAM for PM/PM$_{10}$						
Unit 002 - Sealing and PVC Undercoating Line	PVC Coating Booth #1	0.98	142	Y	142	Y
	PVC Coating Booth #2	0.98	142	Y	142	Y
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	0.98	100.8	Y	100.8	Y
	Topcoat #2 Booth and Oven	0.98	175.6	Y	175.6	Y
	Two-tone and Repair / Topcoat #3 Booth	Combined with Topcoat #2				Y
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth	0.98	88.7	N	88.7	N
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Paint Booth	0.98	136.1	Y	136.1	Y
Unit 006 - Anticorrosion	Black Coat and Wax Booth	0.98	44.4	N	44.4	N
	Anticorrosion Coating Booth	0.98	44.4	N	44.4	N
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Paint LineBooth*****	0.98	95	N	95	N
Unit 007 - Final Repair (Touchup)	Touchup Trim Booth	0.98	29.6	N	29.6	N

CAM for VOC

The VOC CAM previously determined for the above emission units will not be affected by the proposed 2012 enhancement/modification as shown on the CAM Table:

CAM for PM, PM10

The PM/PM10 CAM previously determined for all the other emission units above will not be affected by the proposed 2012 enhancement/modification.

State Rule Applicability Determination

(a) 326 IAC 2-2 (PSD)

The source modification is subject to PSD for VOC, only. See detailed discussion under the Permit Level Determination – PSD section.

(b) 326 IAC 2-2-3 (PSD Rule: Control Technology Review Requirements)

Pursuant to 326 IAC 2-2-3, a major modification shall apply best available control technology for each NSR regulated for which the modification would result in a significant net emissions increase. 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. The proposed modification is subject to PSD only for VOC.

See Appendix B for the PSD BACT analysis.

(c) 326 IAC 2-2-4 (Air Quality Analysis)

See Appendix D of this TSD for the detailed Air Quality Analysis

(d) 326 IAC 2-2-8 (Source Obligation)

(1) Pursuant to 2-2-8(1), approval to construct, shall become invalid if construction is not commenced within eighteen (18) months after receipt of the approval, if construction is discontinued for a period of eighteen (18) months or more, or if construction is not completed within a reasonable time.

(2) Approval for construction shall not relieve the Permittee of the responsibility to comply fully with applicable provisions of the state implementation plan and any other requirements under local, state, or federal law.

(e) 326IAC 2-2-10 (Source Information)

The Permittee has submitted all information necessary to make the determination required under this rule.

(f) 326 IAC 2-2-12 (Permit Rescission)

The permit issued under this rule shall remain in effect unless and until it is rescinded, modified, revoked, or it expires in accordance with 326 IAC 2-1.1-9.5 or section 8 of this rule.

(g) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

This modification (vehicle production increase) will not result in the applicability of 326 IAC 2-4.1-1 because the source is specifically regulated by NESHAP 40 CFR Part 63, Subpart IIII, which was issued pursuant to Section 112(d) of the CAA.

(h) 326 IAC 8-2-9 (Miscellaneous Metal Coating), 326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations.

This modification (vehicle production increase) will not affect these state rules that was determined to be applicable to the source

(i) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

326 IAC 6-3-1(b)(9) specifically exempts welding operations that consume less than six hundred twenty-five (625) pounds of rod or wire per day. Therefore, the new welding operation, which consumes 5.5 pounds/hour (132 pounds/day), which uses less than 625 pounds of welding rod per day, is exempt from 326 IAC 6-3.

(j) 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

326 IAC 7-1.1-2 applies to all emission units with a PTE of 25 tons per year or 10 pounds per hour of sulfur dioxide.

The proposed one (1) natural gas-fired body shop air supply unit is not subject to 326 IAC 7-1.1-2 because it does not have a PTE of 25 tons per year or 10 pounds per hour of sulfur dioxide.

(j) 326 IAC 6-2 (Particulate Emissions from Indirect Heating Facilities)

The one (1) 1.73 natural gas-fired body shop air supply unit is not subject to 326 IAC 6-2, because it is not a source of indirect heating.

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.

The following is the compliance determination and monitoring requirements for the source.

Control	Emission Unit	Parameter	Frequency	Range/Minimum Value
Catalytic Incinerators (TC-1, TC-2, TUT, SUR)	Topcoat #1 Oven, Topcoat #2 Oven, Topcoat #3 Oven, Intermediate Coating Oven and ED Oven	Temperature at the inlet to the catalyst bed	Continuous (once/minute) Stack testing - Every 2.5 years	650^0F or temperature established during latest compliance test.
		Duct pressure or fan amperage	Once/day	Normal range as established during latest compliance test
Thermal Incinerators	Plastic Bumper Coating Line Oven and Fascia Paint Line Oven	Operating temperature	Continuous (once/minute)	1400^0F or temperature established during latest compliance test
		Duct pressure or fan amperage	Once/day	Normal range as established during latest compliance test
Water Wash System	Topcoat #1 Booth, Topcoat #2 Booth, Topcoat #3 Booth, Plastic Bumper Coating Line (Unit 005)	Visual checks of each booth flood pans and water circulation. Warning system to ensure water circulation pump is operational	Once/day visual inspection	None
Dry Filter	PVC Coating Booth #1, PVC Coating Booth #2 (Unit 002), Black and Wax Coating Booth, and Anticorrosion Coating Booth	Inspections of the coating booth stacks	Semi-annual	None

These Compliance Determinations and Compliance Monitoring are necessary to meet the various PSD BACT limits required under 326 IAC 2-2, PSD and minor limits to avoid PSD review.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T 157-27048-00050. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule cites listed in the permit. These changes are not changes to the underlining provisions. The change is only to cite to these rules in Section A - General Information, Section A - Emission Units and Pollution Control Equipment Summary, Section A - Specifically Regulated Insignificant Activities, Section B - Preventative Maintenance Plan, Section B - Emergency Provisions, Section B - Operational Flexibility, Section B - Advanced Source Modification Approval, Section C - Risk Management Plan, the Facility Descriptions, and Section D - Preventative Maintenance Plan.

IDEM, OAQ has clarified the rule cites for the Preventive Maintenance Plan.

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5**(14)** ~~(15)~~][326 IAC 2-7-1(22)]

***

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5**(14)** ~~(15)~~]

***

(c) Final Assembly Operations:

* * *

~~(C) One (1) premium gasoline storage tank, identified as FAC-101, approved in 2011 for construction, located at the tank farm, with a capacity of 19,800 gallons, equipped with submerged fill and Stage 1 vapor balance.~~

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] 326 IAC 2-7-5(**14)** ~~(15)~~]

***

B.11 Preventive Maintenance Plan [326 IAC 2-7-5~~(1),(3) and (13)~~ **(12)**] [~~326 IAC 2-7-6(1) and (6)~~][326 IAC 1-6-3]

***

B.12 Emergency Provisions [326 IAC 2-7-16]

***

(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)~~(9)~~ **(8)** be revised in response to an emergency.

***

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)~~, or (e)~~ without a prior permit revision, if each of the following conditions is met:

***

(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)~~,~~ **or** (c)~~, or (e)~~. 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)~~, and (e)(2)~~.

***

C.13 Risk Management Plan [326 IAC 2-7-5(**11**~~12~~)] [40 CFR 68]

***

SECTION Ds FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(**14**~~15~~)] * * *

***

D.2.5, D.3.5, D.4.8, D.5.3, D.6.7, D.7.2 and D.8.4 - Preventive Maintenance Plan [326 IAC 2-7-5(**12**~~13~~)]

***

On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions included the incorporation of the U.S. EPA's definition of reasonable possibility. The permit previously sited to the EPA definition. Also, the revisions resulted in changes to other rule cites listed in the permit. Neither of these changes are changes to the underlining provisions. The change is only to cite to these rules in Section C - General Reporting and Section C - General Recordkeeping.

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]

***

(c) If there is a reasonable possibility (as defined in ~~40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)~~ **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(~~qq~~ **oo**) and/or 326 IAC 2-3-1(~~ll~~ **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(~~ee~~ **dd**) and/or 326 IAC 2-3-1(~~z~~ **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(~~rr~~ **pp**) and/or 326 IAC 2-3-1(~~mm~~ **kk**)), the Permittee shall comply with following:

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

***

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

***

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

***

(d) If there is a reasonable possibility (as defined in ~~40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)~~ **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(~~qq~~ **oo**) and/or 326 IAC 2-3-1(~~ll~~ **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(~~ee~~ **dd**) and/or 326 IAC 2-3-1(~~z~~ **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(~~rr~~ **pp**) and/or 326 IAC 2-3-1(~~mm~~ **kk**)), the Permittee shall comply with following:

***

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]

(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 (~~qq~~ **oo**) and/or 326 IAC 2-3-1 (~~ll~~ **jj**)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to:***

(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 (~~xx~~ **ww**) and/or 326 IAC 2-3-1 (~~qq~~ **pp**), for that regulated NSR pollutant, and.....

IDEM, OAQ has clarified the Permittee's responsibility with regards to record keeping.

C.17 General Record Keeping Requirements

(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:**

(1) All calibration and maintenance records.
(2) All original strip chart recordings for continuous monitoring instrumentation.
(3) Copies of all reports required by the Part 70 permit.
Records of required monitoring information include the following:
(4) The date, place, as defined in this permit, and time of sampling or measurements.
(5) The dates analyses were performed.
(6) The company or entity that performed the analyses.
(7) The analytical techniques or methods used.
(8) The results of such analyses.
(9) 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.

* * *

IDEM, OAQ has clarified the Permittee's responsibility under CAM:

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

(a) 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 or of initial start-up, whichever is later, 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 or the date of initial startup, whichever is later, 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(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

(b) 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.

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

(a) 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~~**1**) 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~~**2**) 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~~ **i**) initial inspection and evaluation;

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

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

(~~c~~**3**) 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~~ **i**) monitoring results;

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

(~~13~~ **iii**) inspection of the control device, associated capture system, and the process.

(~~d~~**4**) Failure to take reasonable response steps shall be considered a deviation from the permit.

(~~e~~**5**) The Permittee shall record the reasonable response steps taken.

(b)

(1) CAM Response to excursions or exceedances.

(i) 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.

(ii) 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.

(2) 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.

(3) 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 QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(4) 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).

(5) 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.

(6) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) 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:

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

(ii) 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.

(7) 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.

(8) CAM recordkeeping requirements.

(i) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) 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.

(ii) 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.18 General Reporting Requirements **[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(34). 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.

IDEM, OAQ has clarified the interaction of the Quarterly Deviation and Compliance Monitoring Report and the Emergency Provisions.

The Quarterly Deviation and Compliance Monitoring Report

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 of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does 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".

Section A.2 Changes:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

(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 ~~71~~ **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 ~~71~~ **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, with three (3) insignificant natural gas direct fired burners, using a 3.0 MMBtu/hr natural gas-fired catalytic incinerator (TC-1) 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 use no controls and exhaust to one (1) stack, identified as TC-1 Ex.);

(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, with three (3) insignificant natural gas direct fired burners, using a 1.5 MMBtu/hr natural gas-fired catalytic incinerator (TC-2) 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 use no controls and exhaust to one (1) stack, identified as TC-2 Ex.).

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

(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, with three (3) insignificant natural gas-fired burners, using a 2.5 MMBtu/hr natural gas-fired catalytic incinerator (TUT) as VOC control, and exhausting to one (1) stack, identified as TUT-O-1-2;

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

(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) 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) Main paint mix room.

(d) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of ~~71~~ **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) ~~additional~~ robots ~~(referred to as SGC and ACC 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 ~~71~~ **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,** ~~and~~ 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 (PFPLS#2), which will coat 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 booth, 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);

(2) One (1) basecoat spray zone, 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).

(3) One (1) clearcoat spray zone, 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);

(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); and

(7) One (1) paint mix room.

(h) Final Repair (Touchup) painting, identified as Unit 007, with a capacity of 10 units per hour, constructed in 1989, 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;

(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.**

(j) Six (6) storage tanks, identified collectively as Unit 011, and including 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.

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):

(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: [40 CFR 52.21] [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 (~~44~~ **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; 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 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 pounds per year

(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) [40 CFR 52.21] [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.

IDEM has added the following PSD BACT determined for the following emission units that were overlooked in PSD 157-29566-00050:

PSD BACT Two-tone and Repair Booth/Topcoat #3 Booth

Part of the PSD BACT determinations (items (c) and (d)) in the BACT Analysis for PSD 157-29566-00050 for the Topcoat #3 Booth were overlooked when PSD 157-29566-00050 was issued. Therefore, they will be addressed in this permitting action. Note: The Two-tone and Repair Booth is now called Topcoat #3 Booth:

The PSD BACT for the Topcoat #3 Booth was determined in PSD 157-29566-00050 to be the following:

(a) The basecoat and clearcoat booths shall use the most technologically advanced, commercially available coating systems, use of lower VOC content materials like waterborne basecoats, high solid solvent borne clearcoat coatings and high transfer efficiency applicators where feasible to minimize VOC emissions from these operations;

PSD BACT in (a) above, has already been satisfied in PSD 157-29566-00050 because during the issuance of this PSD the Two-tone/Topcoat #3 Booth was traditionally a solvent-borne paint technology and it was converted into waterborne basecoat and high solid solvent borne clearcoat technology to comply with the Topcoat Booth #3 VOC BACT emissions limit. Therefore it will not be added in this permitting action (PSD/SSM 157-31885-00050), but PSD BACT in (b) below will be added:

(b) Good operating practices to minimize VOC emissions:

(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.

PSD BACT - THREE FLASH ZONE HEATERS (1 HEATER FOR TOPCOAT #3 AND 2 HEATERS FOR PLASTIC BUMPER SYSTEM)

The following PSD BACT determination for three (3) flash zone heaters for Topcoat #3 and Plastic Bumper System were not carried over into the permit when PSD 157-29566-00050 was issued. Therefore, they will be added in this permitting action

The PSD BACT for the three (3) flash zone heaters is the following:

(a) The VOC emission from the three (3) flash zone heaters (one heater for Topcoat #3 and two heaters for the Plastic Bumper System) shall each not exceed 0.0055 pound per million British thermal units (lb/MMBtu).

(b) The Permittee shall perform good combustion practices for the three (3) process heaters.

(c) Each of the three (3) 2.5 MMBtu/hr flash zone heaters shall burn natural gas only as fuel.

Section D Changes:

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(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 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.)

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:

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

(~~b~~**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

(~~c~~**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 shall utilize natural gas only for fuel.**

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

(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 ~~1400°F or~~ 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) hourly average temperature from the most recent valid stack test that demonstrates compliance with the limits of Condition D.2.1 as approved by IDEM.

D.2.13 Record Keeping Requirements

* * *

(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.**

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

Compliance with these limitations, and those contained in Conditions D.4.2, D.5.2, D.6.2, and D.8.2, shall satisfy the requirements of 326 IAC 2-2.

SECTION D.3

IDEM has clarified Condition D.3.7 as follows:

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

* * *

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

~~Booth VOC BACT~~ VOC **Emissions Rate** = V_c/C_y

Where:
V_c is the controlled VOC emissions of the booths in pound per year; and
C_y is the booths coating usage in gallon per year.

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 fascia paint line curing oven t~~hermal 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 ~~1400°F or~~ 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) hourly 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.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(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 ~~71~~ **77** units per hour, constructed in 1989, and modified in 2006, 2009 and 2010, consisting of the following units:

* * *

(d) Intermediate (Surfacer) Coating Line, identified as Unit 004, with a capacity of ~~71~~ **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;

SECTION D.4 FACILITY OPERATION CONDITIONS

(2) One (1) Intermediate Coating Booth, utilizing, two (2) ~~additional~~ robots ~~(referred to as SGC and ACC 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.

(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 not exceed 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 Booth #3	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 incinerators used to control VOC emissions from the Topcoat #1 Oven, Topcoat #2 Oven and Intermediate Coating Oven shall each achieve a minimum VOC destruction efficiency of 90%.

The VOC emissions from the Topcoat #3 Booth's Curing Oven shall be vented to the existing Catalytic Incinerator with a 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 Booth #3:

(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.

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

(~~d~~ **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 emission from the one (1) 2.5 MMBtu/hr Topcoat #3 flash zone heater shall not exceed 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.4.13 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 each catalytic incinerator **whenever any of the ED Body Oven, Topcoat #1 Oven, Topcoat #2 Oven, Topcoat #3 Oven, and Intermediate Coating Oven is in operation** to control **the VOC** emissions from the ED Body Oven, Topcoat #1 Oven, Topcoat #2 Oven, Topcoat #3 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 ~~650 °F or~~ 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 at the inlet to the catalyst bed of each catalytic incinerator 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.

D.4.16 Record Keeping Requirements

* * *

(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 bed of** each incinerator and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(e) To document the compliance status with Condition D.4.1(g) and (h), the Permittee shall maintain records of the vendor design guarantees for the one (1) 2.5 MMBtu/hr Topcoat #3 flash zone heater.

(~~e~~**f**) 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.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(b) Sealing and PVC Undercoating Line, identified as Unit 002, with a capacity of ~~71~~ **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 ~~71~~ **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,**

~~and~~ 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.

(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]

* * *

(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:

Facility	lb VOC/gal coating solids (lb/gcs)	kg VOC/liter coating solids (kg/lcs)
Before Vehicle Assembly		
Black and Wax Booth (black phthalic resin application)	17.9	2.14
Black and Wax Booth (inner panel wax application)	6.43	0.77
After Vehicle Assembly		
Anticorrosion Coating Booth (underfloor wax application)	3.59	0.43

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 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.

(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:

~~(a)~~ **(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).

~~(b) 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.~~

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(~~k~~ **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.**

(~~l~~ **j**) Six (6) storage tanks, identified collectively as Unit 011, and including 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.)

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 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.

(b) The 15,000-gallon gasoline storage tank (one of three 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 and PSD 157-31885-00050, 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.~~2~~ **3** Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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.

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

D.7.4 Record Keeping Requirements

(a) To document the compliance status with Condition D.7.2, 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 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) Section C - General Record Keeping Requirements, contains the Permittee's obligations with regard to the records required by this condition.

D.7.5 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 (34).

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [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):

(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 (44)

(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; 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 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.

(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:

SECTION D.8 FACILITY OPERATION CONDITIONS

(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.)

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 requirement:

(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.

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.

Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached Prevention of Significant Deterioration/Significant Source Modification PSD/SSM No. 157-31885-00050 and Significant Permit Modification SPM No. 157-31887-00050. The staff recommends to the Commissioner that these PSD/SSM and SPM 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's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Company Name: Subaru of Indiana Automotive, Inc.
Address City IN Zip: 5500 State Rd 38 East Lafayette, IN 47905
PSD/SSM: 157-31885
SPM: 157-31887
Plt ID: 157-00050
Reviewer: Aida De Guzman
Date: 16-May-2012

PTE After 2012 Modification

Part 70 Permit Emission Unit	Component Emission Unit Description	Air Pollutant	Lbs VOC/Vehicle***	Production Rate	Tons/Year (Controlled)	Overall Control Efficiency	Tons/Year (Uncontrolled)
PTE After Modification - VOC							
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	ED Body Tank and Curing Oven	VOC	0.15	310,000	23.3	0.6	63.3
Unit 002 - Sealing and PVC Undercoating Line	PVC Booths #1 and 2	VOC	0.56	310,000	86	N/A	86.0
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	VOC	2.10	110,000	115.5	0.18	140.9
	Topcoat #2 Booth and Oven	VOC	2.78	200,000	277.50	0.18	339.0
	Twotone and Repair/Topcoat #3 Booth and Oven*	VOC	Combined with Topcoat #2				
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth and Oven	VOC	1.40	310,000	217	0.18	264.6
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Booth and Oven	VOC	0.73	200,000	73.3	0.18	89.0
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Booth and Curing Oven	VOC	1.87	110,000	102.85	0.21	130.2
Unit 006 - Anticorrosion	Anticorrosion Booth	VOC	0.73	310,000	113.15	--	113.15
Unit 007 - Final Repair (Touchup)	Final Repair (Touchup)	VOC	0.00065	310,000	0.1	--	0.1
Unit 010 - Application of Adhesives	Application of Adhesives	VOC	0.11	310,000	17.05	--	17.05
Unit 012 - Purge Solvent and Recovery System	Purge Solvent	VOC	0.35	310,000	54.25	--	54.25
Unit 011 - Three (3) Storage Tanks**	Storage Tanks	VOC	--	--	1.1	--	1.1
	Purge Thinner Storage Tank -5,000 gal	VOC	n/a	n/a	n/a	n/a	n/a
Sourcewide Natural Gas	NG Usage	VOC	--	--	3.4		3.4
Total VOC		--	--	--	**1,084.5**	--	**1,302.1**
PTE After 2012 Mod							
Unit 002 - Sealing and PVC Undercoating Line	PVC Coating Booth #1	$PM/PM_{10}/PM_{2.5}$	0.018	310,000	2.8	0.98	139.5
	PVC Coating Booth #2	$PM/PM_{10}/PM_{2.5}$	0.018	310,000	2.8	0.98	139.5
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	$PM/PM_{10}/PM_{2.5}$	0.037	110,000	2.0	0.98	101.8
	Topcoat #2 Booth and Oven	$PM/PM_{10}/PM_{2.5}$	0.035	200,000	3.5	0.98	175.0
	Twotone and Repair / Topcoat #3 Booth*	$PM/PM_{10}/PM_{2.5}$	0.026	54,000	0.7	0.98	35.1
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth	$PM/PM_{10}/PM_{2.5}$	0.011	310,000	1.7	0.98	85.2
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Paint Booth	$PM/PM_{10}/PM_{2.5}$	0.018	310,000	2.8	0.98	139.5
Unit 006 - Anticorrosion	Black Coat and Wax Booth	$PM/PM_{10}/PM_{2.5}$	0.006	310,000	0.9	0.98	46.5
	Anticorrosion Coating Booth	$PM/PM_{10}/PM_{2.5}$	0.006	310,000	0.9	0.98	46.5
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Paint LineBooth*****	$PM/PM_{10}/PM_{2.5}$	0.0345	110,000	1.9	0.98	94.9
Unit 007 - Final Repair (Touchup)	Touchup Trim Booth	$PM/PM_{10}/PM_{2.5}$	0.004	310,000	0.6	0.98	29.6
Total $PM/PM_{10}/PM_{2.5}$		--	--	--	**20.7**	--	**1033.1**

Note:
New emission units (MIG welding and Body Shop AHU) were not included in this table as each unit PTE is at insigniifcant level.
Calculation Method
VOC Controlled (tons/year) = lbs VOC/vehicle * Projected Production * (1/2000)
VOC Uncontrolled (tons/year) = VOC Controlled (tons/year) / (1 - Control Efficiency)

*Part of Topcoat #1 and Topcoat #2 PTE estimates. Since the combination of all booths utilized in the Topcoat System (i.e., Topcoat #1, Topcoat #2, and Twotone) exceed the CAM applicability threshold, CAM has been determined to be applicable to the Topcoat System.
**No calculation of PTE performed. Potential emissions of VOC are considered negligible.
***Based on weighted actual usage factor and permitted emission limit of 23.1 tons/year.
****SIA Significant Source Modification request dated March 31, 2009 and Addendum on November 16, 2009 resulted in a revised VOC rate of 393.0 tons/year for the Topcoat System. The requested rate slightly alters the calculations.
*****Three separate materials are applied in the Fascia Paint Line System (primer, basecoat and clearcoat). Conservatively assumed as one booth for CAM applicability purposes.

PTE Prior to 2010 PSD Modification (PSD 157-29566-00050)							
Part 70 Permit Emission Unit	Component Emission Unit Description	Air Pollutant	Lbs VOC/Vehicle***	Maximum Production Rate (veh/yr)	Tons/Year (Controlled)	Overall Control Efficiency	Tons/Year (Uncontrolled)
PTE Prior to Modification - VOC							
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	ED Body Tank and Curing Oven	VOC	0.15	262,000	19.7	0.63	53.1
	Unit 002-Sealing and PVC Undercoating	VOC	0.56	262,000	73.4	--	73.4
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	VOC	1.59	93,000	73.9	0.18	90.2
	Topcoat #2 Booth and Oven	VOC	1.59	169,000	134.4	0.18	163.8
	Twotone and Repair/Topcoat #3 Booth and Oven*	VOC	******Combined with Topcoat #2				
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth and Oven	VOC	1.40	262,000	183.4	0.18	223.7
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Booth and Oven	VOC	1.15	262,000	150.7	0.18	183.7
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Booth and Curing Oven	VOC	1.56	100,000	78.0	0.21	98.7
Unit 006 - Anticorrosion	Anticorrosion Booth	VOC	0.73	262,000	95.6	--	95.63
Unit 007 - Final Repair (Touchup)	Final Repair (Touchup)	VOC	0.00065	262,000	0.1	--	0.1
Unit 010 - Application of Adhesives	Application of Adhesives	VOC	0.11	262,000	14.4	--	14.4
Unit 012- Purge Solvent and Capture System	Purge solvent	VOC	0.35	262,000	45.9	--	45.9
Unit 011 - Three (3) Storage Tanks**	Storage Tanks	VOC	--	--	1.1	n/a	1.1
	Purge Thinner Storage Tank - 5,000 gal	VOC	n/a	n/a	n/a	n/a	n/a
Sourcewide Natural Gas	NG Usage	VOC	--	--	3.4	--	3.4
Total VOC		**--**	**--**	**--**	**873.8**	**--**	**1,047.1**
PTE Prior to Modification - $PM/PM_{10}/PM_{2.5}$							
Unit 002 - Sealing and PVC Undercoating Line	PVC Coating Booth #1	$PM/PM_{10}/PM_{2.5}$	0.018	262,000	2.4	0.98	117.9
	PVC Coating Booth #2	$PM/PM_{10}/PM_{2.5}$	0.018	262,000	2.4	0.98	117.9
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	$PM/PM_{10}/PM_{2.5}$	0.037	93,000	1.7	0.98	86.0
	Topcoat #2 Booth and Oven	$PM/PM_{10}/PM_{2.5}$	0.035	169,000	3.0	0.98	147.9
	Twotone and Repair / Topcoat #3 Booth	$PM/PM_{10}/PM_{2.5}$	******Combined with Topcoat #2				
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth	$PM/PM_{10}/PM_{2.5}$	0.011	262,000	1.4	0.98	72.0
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Paint Booth	$PM/PM_{10}/PM_{2.5}$	0.018	262,000	2.4	0.98	117.9
Unit 006 - Anticorrosion	Black Coat and Wax Booth	$PM/PM_{10}/PM_{2.5}$	0.006	262,000	0.8	0.98	39.3
	Anticorrosion Coating Booth	$PM/PM_{10}/PM_{2.5}$	0.006	262,000	0.8	0.98	39.3
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Paint LineBooth*****	$PM/PM_{10}/PM_{2.5}$	0.035	100,000	1.7	0.98	86.2
Unit 007 - Final Repair (Touchup)	Touchup Trim Booth	$PM/PM_{10}/PM_{2.5}$	0.004	262,000	0.5	0.98	26.2
Total $PM/PM_{10}/PM_{2.5}$		**--**	**--**	**--**	**17.0**	**--**	**850.7**

Note:
Calculation Method
VOC Controlled (tons/year) = lbs VOC/vehicle * Production * (1/2000)
VOC Uncontrolled (tons/year) = VOC Controlled (tons/year) / (1 - Control Efficiency)

*Part of Topcoat #1 and Topcoat #2 PTE estimates. Since the combination of all booths utilized in the Topcoat System (i.e., Topcoat #1, Topcoat #2, and Twotone) exceed the CAM applicability threshold, CAM has been determined to be applicable to the Topcoat System.
**No calculation of PTE performed. Potential emissions of VOC are considered negligible.
***Based on weighted actual usage factor and permitted emission limit of 23.1 tons/year.
****SIA Significant Source Modification request dated March 31, 2009 and Addendum on November 16, 2009 resulted in a revised VOC rate of 393.0 tons/year for the Topcoat System. The requested rate slightly alters the calculations.
*****Three separate materials are applied in the Fascia Paint Line System (primer, basecoat and clearcoat). Conservatively assumed as one booth for CAM applicability purposes.
******The production rate of Topcoat #2 (169,000) includes the production rate of Twotone and Repair / Topcoat #3 Booth and Oven.

Company Name: Subaru of Indiana Automotive, Inc.
Address City IN Zip: 5500 State Rd 38 East Lafayette, IN 47905
PSD/SSM: 157-31885
SPM: 157-31887
Plt ID: 157-00050
Reviewer: Aida De Guzman
Date: 16-May-2012

CAM Evaluation in TV Renewal 157-27048-00050

Part 70 Permit Emission Unit	Component Emission Unit Description	Air Pollutant	PTE After Modification				
			Lbs VOC/Vehicle	Production Rate	Tons VOC/Year (Controlled)	Overall Control Efficiency	Tons VOC/Year (Uncontrolled)
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	ED Body tank and Curing Oven	VOC	0.15	310,000	23.3	0.63	63
Unit 002 - Sealing and PVC Undercoating Line	PVC Booths 1 and 2	VOC	0.56	310,000	86.0	N/A	86.0
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	VOC	2.10	110,000	115.5	0.18	140.9
	Topcoat #2 Booth and Oven	VOC	2.78	200,000	278.0	0.18	339.0
	Twotone and Repair/Topcoat #3 Booth and Oven*	VOC	Combined with Topcoat #2				
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth and Oven	VOC	1.40	310,000	217	0.18	264.6
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Booth and Oven	VOC	0.73	200,000	73.00	0.18	89.0
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Booth and Curing Oven	VOC	1.87	110,000	102.85	0.21	130.2
Unit 006 - Anticorrosion	Anticorrosion Booth	VOC	0.73	310,000	113.15	-	113.15
Unit 007 - Final Repair (Touchup)	Final Repair (Touchup)	VOC	0.00065	310,000	0.1	-	0.1
Unit 010 - Application of Adhesives	Application of Adhesives	VOC	0.11	310,000	17.05	-	17.05
Unit 011 - Three (3) Storage Tanks**	Storage Tanks	VOC	-	-	1.1	-	1.1
	Purge Thinner Storage Tank- 5,000 gallons	VOC	n/a	n/a	n/a	n/a	n/a
Unit 012 -Purge Solvent Usage and Capture System	Purge Solvent	VOC	0.35	310,000	54.3	-	54.25
TOTAL VOC					**1,081.3**		**1,298.2**

Part 70 Permit Emission Unit	Component Emission Unit Description	Air Pollutant	Calculation of PTE				
			Lbs PM/Vehicle***	Production Rate	Tons PM/Year (Controlled)	Overall Control Efficiency	Tons PM/Year (Uncontrolled)
Unit 002 - Sealing and PVC Undercoating Line	PVC Coating Booth #1	PM	0.018	310,000	2.8	0.98	142.0
	PVC Coating Booth #2	PM	0.018	310,000	2.8	0.98	142.0
Unit 003 - Topcoat System	Topcoat #1 Booth	PM	0.037	110,000	2.0	0.98	100.8
	Topcoat #2 Booth	PM	0.035	200,000	3.5	0.98	175.6
	Twotone and Repair/Topcoat# 3 Booth*	PM	0.026	54,000	0.7	0.98	35.1
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth	PM	0.011	310,000	1.8	0.98	88.7
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Paint Booth	PM	0.018	310,000	2.7	0.98	136.1
Unit 006 - Anticorrosion Coating	Black Coat and Wax Booth	PM	0.006	310,000	0.89	0.98	44.4
	Anticorrosion Coating Booth	PM	0.006	310,000	0.89	0.98	44.4
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Paint Line Booth*****	PM	0.0345	110,000	1.9	0.98	94.9
Unit 007 - Final Repair (touchup) Painting	Touchup Trim Booth	PM	0.004	310,000	0.6	0.98	29.6
TOTAL PM/PM10/PM2.5					**20.7**		**1,033.4**

Methodology:

VOC Controlled Tons/Year: Lbs VOC/Vehicle * Projected Production * (1/2000)

VOC Uncontrolled Tons/Year: Tons/Year (Controlled) / (1 - Control Efficiency) =

* Part of Topcoat #1 and Topcoat #2 PTE estimates. Since the combination of all booths utilized in the Topcoat system (i.e., topcoat #1, topcoat #2 and Twotone) exceed the CAM applicability threshold, CAM has been determined to be applicable to the Topcoat system.

** No calculation of PTE performed. Potential emissions of VOC are considered negligible.

*** Based on weighted actual usage factor and permitted emission limit of 23.1 tons/year.

System.

***** Three separate materials are applied in the Fascia Paint Line system (primer, basecoat and clearcoat). Conservatively assumed as one booth for CAM Applicability purposes.

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CAM Evaluation After 2012 Modification

Part 70 Permit Emission Unit	Component Emission Unit Description	Overall Control Efficiency	Tons/Year (Uncontrolled)	CAM Determination	Tons/Year (Uncontrolled)	CAM Determination
CAM For VOC						
PTE Prior to Modification					**PTE After Modification**	
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	ED Body Tank and Curing Oven	0.6	63	N	63	N
Unit 002 - Sealing and PVC Undercoating Line	PVC Booths 1 and 2	0.2	86.0	N	86.0	N
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	0.18	140.9	Y	140.9	Y
	Topcoat #2 Booth and Oven	0.18	339.0	Y	339.0	Y
	Twotone and Repair/Topcoat #3 Booth and Oven*	Combined with Topcoat #2				
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth and Oven	0.18	264.6	Y	264.6	Y
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Booth and Oven	0.18	89.0	N	89	N
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Booth and Curing Oven	0.21	130.2	Y	130.2	Y
Unit 006 - Anticorrosion	Anticorrosion Booth	--	113.15	N*	113.15	N*
Unit 007 - Final Repair (Touchup)	Final Repair (Touchup)	--	0.1	N	0.1	N
Unit 010 - Application of Adhesives	Application of Adhesives	--	17.1	N	17.1	N
Unit 011 - Three (3) Storage Tanks**	Storage Tanks	--	1.1	N	1.1	N
	Purge Thinner Storage Tank - 5,000 gal	n/a	n/a	n/a	n/a	--
Unit 012 -Purge Solvent Usage and Capture System	Purge Solvent	--	54.3	N	54.3	N
Total VOC		**--**	**1,298.2**		**1,298.7**	
CAM for PM/PM_{10}/$PM_{2.5}$						
Unit 002 - Sealing and PVC Undercoating Line	PVC Coating Booth #1	0.98	142.0	Y	139.5	Y
	PVC Coating Booth #2	0.98	142.0	Y	139.5	Y
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	0.98	100.8	Y	101.75	Y
	Topcoat #2 Booth and Oven	0.98	175.6	Y	175	Y
	Twotone and Repair / Topcoat #3 Booth	0.98	35.1	N	35.1	N
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth	0.98	88.7	N	85.25	N
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Paint Booth	0.98	136.1	Y	139.5	Y
Unit 006 - Anticorrosion	Black Coat and Wax Booth	0.98	44.4	N	46.5	N
	Anticorrosion Coating Booth	0.98	44.4	N	46.5	N
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Paint LineBooth*****	0.98	94.9	N	94.9	N
Unit 007 - Final Repair (Touchup)	Touchup Trim Booth	0.98	29.6	N	29.6	N
Total PM/PM_{10}/$PM_{2.5}$		**--**	**1033.4**		**1033.1**	

*Anticorrosion VOC emission is not controlled. Therefore it is not subject to CAM.

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PTE Change/Increase from Modification (326 IAC2-7-10.5 Applicability)

VOC					
			PTE Prior to 2010 PSD Modification (157-29566-00050)	****PTE After 2010 and 2012 Modifications**	**PTE Change After Modification**
Part 70 Permit Emission Unit	**Component Emission Unit Description**	**Overall Control Efficiency**	**PTE Tons/Year**	**PTE Tons/Year**	
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	ED Body Tank and Curing Oven	0.6	53.11	63.3	10.19
Unit 002- Sealing and PVC Undercoating Line	PVC Booths #1 and #2	--	73.36	86	12.64
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	0.18	90.16	140.9	50.74
	Topcoat #2 Booth and Oven	0.18	163.85	339	175.15
	Twotone and Repair/Topcoat #3 Booth and Oven*	Combined with Topcoat #2			
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth and Oven	0.18	223.7	264.6	40.9
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Booth and Oven	0.18	183.7	89	-94.72
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Booth and Curing Oven	0.21	98.7	130.2	31.5
Unit 006 - Anticorrosion	Anticorrosion Booth	--	95.63	113.15	17.52
Unit 007 - Final Repair (Touchup)	Final Repair (Touchup)	--	0.1	0.1	0
Unit 010 - Application of Adhesives	Application of Adhesives	--	14.4	17.05	2.64
Unit 012 -Purge Solvent and Capture System	Purge Solvent	--	45.9	54.25	8.4
Unit 011 - Three (3) Storage Tanks**	Storage Tanks	--	1.1 controlled	1.1 controlled	0
	Purge Thinner Storage Tank- 5,000 gallons	n/a	n/a	n/a	n/a
Sorcewide Natural Gas	Natural Gas Usage	--	3.4	3.4	0
Total VOC		**--**	**1,047.1**	**1,302.1**	**319.58**
$PM/PM_{10}/PM_{2.5}$					
Unit 002 - Sealing and PVC Undercoating Line	PVC Coating Booth #1	0.98	117.9	139.5	21.60
	PVC Coating Booth #2	0.98	117.9	139.5	21.60
Unit 003 - Topcoat System****	Topcoat #1 Booth and Oven	0.98	86.0	101.8	15.73
	Topcoat #2 Booth and Oven	0.98	147.9	175.0	27.13
	Twotone and Repair / Topcoat #3 Booth	Combined with Topcoat #2		35.1	35.10
Unit 004 - Intermediate (Surfacer) Coating Line	Intermediate Coating Booth	0.98	72.0	85.2	13.20
Unit 005 - Plastic Bumper Coating Line (PBL)	PBL Paint Booth	0.98	117.9	139.5	21.60
Unit 006 - Anticorrosion	Black Coat and Wax Booth	0.98	39.3	46.5	7.20
	Anticorrosion Coating Booth	0.98	39.3	46.5	7.20
Plastic Fascia Paint Line System (PFPLS#2)	Fascia Paint LineBooth*****	0.98	86.2	94.9	8.62
Unit 007 - Final Repair (Touchup)	Touchup Trim Booth	0.98	26.2	29.6	3.40
Sourcewide Natural Gas	Natural gas Usage	--	PM = 2.3 PM10/PM2.5 = 9.0	PM = 2.3 PM10/PM2.5 = 9.0	
Total PM			**853.0**	**1035.4**	**182.4**
Total $PM/PM_{10}/PM_{2.5}$		**--**	**859.7**	**1042.1**	**182.4**

**PTE After 2010 and 2012 Modifications (PSD 157-29566-00050 & PSD 157-31885-00050) since these 2 modifications have been determined to be 1 project.

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PTE - Sourcewide Natural Gas Limit (326 IAC 2-7-10.5 applicability)

HHV mmBtu/mmscf	Sourcewide Throughput Limit MMCF/yr
1020	**2,380**

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	50 **see below	5.5	84
Potential Emission in tons/yr	2.3	9.0	9.0	0.7	59.5	6.5	100.0

*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

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

HAPs Emissions

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Heat Input Capacity
MMBtu/hr

Sourcewide NG Usage Limit (HAPs Emissions)

	HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total
Potential Emission in tons/yr	2.499E-03	1.428E-03	8.925E-02	2.142E+00	4.046E-03	2.239E+00

	HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	
Potential Emission in tons/yr	5.950E-04	1.309E-03	1.666E-03	4.522E-04	2.499E-03	6.521E-03
					Worst Single HAP (Hexane)	2.142E+00
					Combined HAPs	2.246E+00

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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Welding Emissions							
Weld Rod Usage Rate		Emission Factor**	Uncontrolled PM/PM10/PM2.5		Control Efficiency*** (%)	Controlled PM Emissions	
lbs/hr	lbs/yr	lb/10^3 lb	lbs/hr	tons/yr		lbs/hr	ton/yr
5.5	33,000	5.2	0.03	0.09	70%	0.01	0.03

Notes:

**Emission factor (5.2) taken from AP-42, Chapter 12.19 “Electric Arc Welding,” Table 12.19.1 “PM_{10} Emission Factors for Welding Operations." Welding Process - GMAW (SCC 3-09-052),
*** the entire body shop is controlled by fabric filter where the welding gas is exhausted
****The process weight rate rule according to 326 IAC 6-3-1(1)(b)(9) (Rule 3. Particulate Emission Limitations for Manufacturing Processes - Applicability) states "The following manufacturing

Methodology:
Uncontrolled PTE -PM/PM10/PM2.5 (lbs/hr) = Usage Rate (lbs/hr) / 1000 * Emission Factor (lb/10^3 lb)
Uncontrolled PTE - PM/PM10/PM2.5 (tons/yr) = Usage Rate (lbs/yr) / 1000 * Emission Factor (lb/10^3 lb) *2000 lbs/ton
Controlled PTE - PM Emissions (lbs/hr) = Uncontrolled PM/PM10/PM2.5 Emissions (lb/hr) * 1 - Control Efficiency
Controlled PTE - PM/PM10/PM25 (ton/yr) = Uncontrolled PM/PM10/PM2.5 Emissions (ton/yr) * 1 - Control Efficiency

Proposed CO_2 Usage/Consumption (lbs/year)*	Percent Released as CO_2 (%)	Total Pounds of CO_2 (lbs/year)	Total Tons of CO2e (tons/year)
45,000	100%	45,000	22.5

Notes:
*Based on historical usage increased by 30%.
Using CO2 shielding gas

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

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Table 2-8 - New Body Shop ASU

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
1.7	1020	14.9

Body Shop Air Supply Unit

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	50 **see below	5.5	84
Potential Emission in tons/yr	0.01	0.06	0.06	0.004	0.37	0.041	0.6

*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

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

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Table 2-8

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Heat Input Capacity
MMBtu/hr

1.7
Body Shop Air Supply Unit

	HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	Total
Potential Emission in tons/yr	1.560E-05	8.915E-06	5.572E-04	1.337E-02	2.526E-05	1.398E-02

	HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	
Potential Emission in tons/yr	3.714E-06	8.172E-06	1.040E-05	2.823E-06	1.560E-05	4.071E-05
					Worst Single HAP (Hexane)	1.337E-02
					Combined HAPs	1.402E-02

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
Greenhouse Gas Emissions

Table 2-8

Heat Input Capacity
MMBtu/hr

1.7
Body Shop Air Supply Unit

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	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	891	0.0	0.0
Summed Potential Emissions in tons/yr	891		
CO_2e Total in tons/yr	897		

Methodology
The N_2O Emission Factor for uncontrolled is 2.2. The N_2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO_2e (tons/yr) = CO_2 Potential Emission ton/yr x CO_2 GWP (1) + CH_4 Potential Emission ton/yr x CH_4 GWP (21) + N_2O Potential Emission ton/yr x N_2O GWP (310).

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

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Table 2-9 - New Paint Shop Air House Unit

Heat Input Capacity MMBtu/hr	HHV mmBtu/mmscf	Potential Throughput MMCF/yr
12.0	1020	103.1

Paint Shop Air House Unit

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	50 **see below	5.5	84
Potential Emission in tons/yr	0.1	0.4	0.4	0.0	2.6	0.3	4.3

*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

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

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Table 2-9

Heat Input Capacity
MMBtu/hr

12.0
Paint Shop Air House Unit

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	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total
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	1.082E-04	6.184E-05	3.865E-03	9.275E-02	1.752E-04	9.696E-02

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	
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	2.576E-05	5.668E-05	7.214E-05	1.958E-05	1.082E-04	2.824E-04
					Worst Single HAP (Hexane)	9.275E-02
					Combined HAPs	9.725E-02

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
Greenhouse Gas Emissions

Table 2-9

Heat Input Capacity
MMBtu/hr

12.0
Paint Shop Air House Unit

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	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	6,184	0.1	0.1
Summed Potential Emissions in tons/yr	6,184		
CO2e Total in tons/yr	6,221		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

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Table 2-12 - PTE Summary of New Emission Units

		Uncontrolled PTE									
		PM	PM_{10}	$PM_{2.5}$	NO_x	SO_2	CO	VOC**	HAP*** (Individual)	HAP (Total)	GHG (CO2e)
Welding Emissions	Table 2-4	0.09	0.09	0.09	--	--	--	--	--	--	22.5
Natural Gas Combustion - Body Shop AHU	Tables 2-8 and 2-8a	0.01	0.06	0.06	0.37	0.004	0.62	0.04	0.013	0.014	897
Natural Gas Combustion - Paint Shop AHU****	Tables 2-9 and 2-9a	0.10	0.39	0.39	2.58	0.031	4.33	0.28	0.093	0.097	6,221
Project Total PTE (Proposed Enhancement Project)		**0.2**	**0.5**	**0.5**	**2.9**	**0.035**	**5.0**	**0.3**	**0.106**	**0.111**	**7,141**
		Controlled PTE									
Source Operation	**Reference**	**PM**	**PM_{10}**	**$PM_{2.5}$**	**NO_x**	**SO_2**	**CO**	**VOC****	**HAP*** (Individual)**	**HAP (Total)**	**GHG (CO2e)**
Welding Emissions	Table 2-4	0.03	0.03	0.03	--	--	--	--	--	--	
Natural Gas Combustion - Body Shop AHU	Tables 2-8 and 2-8a	0.01	0.06	0.06	0.37	0.004	0.62	0.04	0.013	0.014	897
Natural Gas Combustion - Paint Shop AHU****	Tables 2-9 and 2-9a	0.10	0.39	0.39	2.58	0.031	4.33	0.28	0.093	0.097	6,221
Project Total PTE (Proposed Enhancement Project)		**0.1**	**0.5**	**0.5**	**2.9**	**0.035**	**5.0**	**0.3**	**0.106**	**0.111**	**7,118**

Note:
****Paint Shop AHU is building air conditioning system- this type of activity is exempt as specified in 326 IAC 2-1.1-3(e)(33)(A) if the modification only consists of this activity. Since the modification includes other activites, it is therefore subject to permitting, under 326 IAC 2-7-10.5.

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Table 2-1 - Baseline Actual VOC Emissions for 2008 and 2009

EMISSION UNIT	2008 VOC BASELINE ACTUALS (TONS/YEAR)	2009 VOC BASELINE ACTUALS (TONS/YEAR)	2-YEAR AVERAGE VOC BASELINE ACTUALS (TONS/YEAR)*
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	12.0	11.9	11.9
Unit 002 - Sealing and PVC Undercoating Line**	28.9	28.4	28.6
Unit 003 - Topcoat System (Topcoat 1)	71.2	90.9	81.1
Unit 003 - Topcoat System (Topcoat 2)	123.8	93.5	108.6
Unit 004 - Intermediate (Surfacer) Coating Line	126.6	114.3	120.4
Unit 005 - Plastic Bumper Coating Line (PBL)	79.3	79.1	79.2
PFPLS#2 - Plastic Fascia Paint Line System	33.2	39.5	36.3
Unit 006 - Anticorrosion Coating	14.0	7.6	10.8
Unit 007 - Final Repair (Touchup) Painting	0.1	0.0	0.1
Unit 010 - Application of Adhesives	10.4	9.5	9.9
Unit 012 -Purge Solvent and Capture System	59.7	61.3	60.5
Plantwide Natural Gas Combustion	2.1	1.8	2.0
Body Shop	--	--	--
Storage Tanks	0.5	0.4	0.43
TOTALS (TONS/YEAR)	**561.6**	**538.3**	**550.0**

*Baseline actuals are based on time period of January 2008 - December 2009.
**Emissions from Sealing and PVC Undercoating line are adjusted to account for VOC retention in materials.
***Utilized in 2010 PSD expansion project. 2012 enhancement project does not change or alter the emission information. As a result, this emissions information is being reused to assess PSD applicability for the enhancement project.

Company Name: Subaru of Indiana Automotive, Inc.
Address City IN ZIP: 5500 State Rd 38 East Lafayette, IN 47905
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Reviewer: Aida De Guzman
Date: 16-May-2012

Table 2-2
Baseline Actuals to Projected Actuals - Natural Gas Combustion (PM/PM10/PM2.5, NOx, CO, VOC, SO2 and GHG Combustion Emissions)

Natural Gas Usage Historical Information

Month/Year	Gas Usage (mmscf/month)
Jan-08	132.01
Feb-08	120.80
Mar-08	86.12
Apr-08	63.93
May-08	48.40
Jun-08	26.82
Jul-08	16.23
Aug-08	27.09
Sep-08	32.15
Oct-08	62.13
Nov-08	75.56
Dec-08	85.41
Jan-09	101.73
Feb-09	85.43
Mar-09	69.95
Apr-09	48.67
May-09	29.10
Jun-09	23.09
Jul-09	17.19
Aug-09	23.33
Sep-09	29.65
Oct-09	59.34
Nov-09	65.82
Dec-09	93.56
2008-2009 Average	712

Data based on monthly emission spreadsheets

Natural Gas Emission Calculations

Pollutant	Emission Factor (lb/mmscf)	January 2008 - December 2009 Average Baseline Emissions (tons/year)	Projected Actual Emissions (tons/year) Based on Vehicle Capacity Increase	Projected Net Change (tons/year)
$PM/PM_{10}/PM_{2.5}$	7.6	2.7	4.7	2.0
NO_X	100	35.6	62.3	26.7
CO	84	29.9	52.3	22.5
SO_2	0.6	0.2	0.4	0.2
VOC	5.5	2.0	3.4	1.5

Emission factors from AP-42, Tables 1.4-1, 1.4-2, July 1998

PROJECTED ACTUALS	
Capacity Increase =	1.75
Projected Actuals N.G. Usage, mmscf	1,246.43
Net Change N. G Usage, mmscf	534.68
(average 177,020 vehicles during 2008/2009 to 310,000 vehicles per year)	

1/2008 - 12/2008 Usage	**776.6411**	**mmscf**
1/2009 - 12/2009 Usage	**646.8588**	**mmscf**
Time Period Average Usage	**711.75**	**mmscf**
Permitted Natural Gas Usage =	**2380**	**mmscf**

NET CHANGE	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Baseline Actual, tons/yr	42,705	0.8	0.8
Projected Actual, tons/yr	74,786	1.4	1.4
Net Increase in tons/yr	32,081	0.6	0.6
Summed Baseline, tons/yr	42,707		
Summaed Projected Actual, tons/yr	74,788		
Summed Net Increase in tons/yr	32,082		
CO2e Baseline Total in tons/yr	42,965		
CO2e Projected Total in tons/yr	75,241		
CO2e Net Increase Total in tons/yr	32,276		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x

Notes:

* Baseline actuals based on 2-year natural gas usage average (January 2008 - December 2009). Baseline Tons/year = Average Usage (mmscf) x Emission Factor (lb/mmscf) / 2000
** Based on permitted maximum of 2380 million standard cubic feet of natural gas. Projected Actuals Tons/year = Permitted Usage (mmscf) x Emission Factor (lb/mmscf) / 2000

***As stated in 326 IAC 2.2-1(rr), existing units that could have accommodated the change can be excluded from the projected actual emission estimate. Since SIA is not proposing any physical changes to the existing combustion devices, there should be no net increase in emissions from combustion equipment as a result of the proposed project. However, for purposes of this application, projected actual emissions have been conservatively estimated to account for a projected change in combustion related air pollutants as a result of this project. Utilized in 2010 PSD expansion project. 2012 enhancement project does not change or alter the emission information. As a result, this emissions information is being reused to assess PSD applicability for the enhancement project.

****PM, PM_{10} and $PM_{2.5}$ assumed to have the same identical emission rates, which is a conservative overestimate.

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Table 2-3 - Sourcewide Post Change PTE

Operation	Emission Factor (lb VOC/vehicle)	Maximum Production (vehicles/yr)	Post Change PTE (tons/year)
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	0.15	310,000	23.3
Unit 002 - Sealing and PVC Undercoating Line	0.56	310,000	86.0
Unit 003 - Topcoat System (Topcoat 1)	2.10	110,000	115.5
Unit 003 - Topcoat System (Topcoat 2 and Topcoat 3)**	2.78	200,000	277.5
Unit 004 - Intermediate (Surfacer) Coating Line	1.40	310,000	217.0
Unit 005 - Plastic Bumper Coating Line (PBL)	0.73	200,000	73.3
PFPLS#2 - Plastic Fascia Paint Line System	1.87	110,000	102.6
Unit 006 - Anticorrosion Coating	0.73	310,000	113.5
Unit 007 - Final Repair (Touchup) Painting	0.00065	310,000	0.10
Unit 010 - Application of Adhesives	0.11	310,000	17.1
Plantwide Natural Gas Combustion	--	--	3.4
Storage Tanks	--	--	1.1
Unit 012 - Purge Solvent Usage and Capture System	0.350	310,000	54.3
Total	--	--	1,084.5

Notes:
The ED Line emission factor includes the dip/rinse tanks and tanks/oven where PTE for dip/rir
* Unit 002 potential rate reflects 2006 permitted value plus the additional usage from the LASD Project (Minor Source Modification 157-29321-00050).
** Includes existing Topcoat 2 and modified Twotone Paint Line System. Individual emission estimates for Topcoat 2 and 3 have been combined, to be consistent with the 2006 modification project and one overall VOC emission rate limitation of 393 tons/year for the Topcoat System.

***Utilized in 2010 PSD expansion project. 2012 enhancement project does not change or alter the emission information. As a result, this emissions information is being reused to assess PSD applicability for the enhancement project.

Methodology:

EF, Lbs/Vehicle x Production rate, Vehicles/Year x 1/2000 = Tons VOC/Year

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Table 2-13 - Baseline VOC Actual to PTE Test

EMISSION UNIT	VOC BASELINE ACTUALS (TONS/YEAR)*	POST CHANGE VOC PTE (TONS/YEAR)	VOC EMISSION CHANGE (TONS/YEAR)
Unit 001 - Electrodeposition Coating of Vehicle Bodies (ED Coating Line)	11.95	23.3	11.3***
Unit 002 - Sealing and PVC Undercoating Line	28.64	86.0	57.4**
Unit 003 - Topcoat System (Topcoat 1)	81.06	115.5	34.4**
Unit 003 - Topcoat System (Topcoat 2 and Topcoat 3)	108.65	277.5	168.9***
Unit 004 - Intermediate (Surfacer) Coating Line	120.44	217.0	96.6**
Unit 005 - Plastic Bumper Coating Line (PBL)	79.19	73.3	-5.9
PFPLS#2 - Plastic Fascia Paint Line System	57.86	102.6	44.7**
Unit 006 - Anticorrosion Coating	10.81	113.5	102.7**
Unit 007 - Final Repair (Touchup) Painting	0.06	0.1	0.0**
Unit 010 - Application of Adhesives	9.95	17.1	7.1***
Unit 012 - Purge Solvent and Capture System	39.01	54.3	15.2**
Plantwide Natural Gas Combustion	1.96	3.4	1.5**
Storage Tanks	0.42	1.1	0.7**
TOTALS (TONS/YEAR)	**550.0**	**1084.5**	**534.5**

Notes:
* Baseline actuals based on time period of January 2008 - December 2009.

** Emission unit will experience an increase in emissions from increased utilization.

*** Emission units will experience an increase in emissions as a result of a physical change and/or increased utilization. There will be no physical change to Topcoat 2 Coating Line but this line will experience an increase in emissions related to the Project because of increased utilization. Topcoat 3 Booth will receive a physical change that reduces emissions on a unit basis but will experience an increase in emissions as a result of increased utilization.

****Utilized in 2010 PSD expansion project. 2012 enhancement project does not change or alter the emission information. As a result, this emissions information is being reused to assess PSD applicability for the enhancement project.

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Table 2-14- Estimated Projected Actual Emissions for PM/PM10/PM2.5 for 2008-2009

Historical Actual PM Emissions*

Calendar Year	Vehicle Production**	PM Emissions (tons/year)**	PM Emissions (lbs/vehicle)
2000	208,776	6.90	0.07
2001	186,215	8.14	0.09
2002	132,422	6.22	0.09
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

Baseline Actual PM Emissions*

Calendar Year	PM Emissions (tons/year)
2008	7.07
2009	6.29
Two-Year Average	6.68

*PM emission rates assume PM_{10} and $PM_{2.5}$ are equivalent.
**Vehicle production and PM Emissions based on data submitted in ISTEPS for 2000-2009

Projected Potential Emission from Paint Overspray ***

0.085 lbs of PM/Vehicle x 310,000 vehicles/year = 23,350 lbs/year x 1 ton/2000 lbs =	**13.2**	**tons/year PM/PM_{10}/$PM_{2.5}$**

***Reflects actual material usage, actual weight percent solids, actual transfer efficiency and removal efficiency of the paint overspray collection systems.

Projected Potential Emissions Minus Baseline Actual Emissions

13.2 tons/year - 6.7 tons/year average =	**6.5**	**tons/year PM/PM_{10}/$PM_{2.5}$**

****Utilized in 2010 PSD expansion project. 2012 enhancement project does not change or alter the emission information. As a result, this emissions information is being reused to assess PSD applicability for the enhancement project.

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Table 2-15 - Controlled/Limited PTE from the Project								
EMISSION CHANGES	**VOC EMISSIONS (TONS/YEAR)**	**NO_X EMISSIONS (TONS/YEAR)**	**CO EMISSIONS (TONS/YEAR)**	**PM EMISSIONS (TONS/YEAR)**	**PM_{10} EMISSIONS (TONS/YEAR)**	**$PM_{2.5}$ EMISSIONS (TONS/YEAR)**	**SO_2 EMISSIONS (TONS/YEAR)***	**GHG (CO2e)**
New Emission Units - 2012 Enhancement Project								
Welding Equipment	--	--	--	0.03	0.03	0.03	--	22.5
Natural Gas Combustion- Body Shop AHU	0.04	0.4	0.6	0.01	0.06	0.06	0.004	897
Total Increase - New Emission Units	**0.04**	**0.37**	**0.62**	**0.04**	**0.08**	**0.08**	**0.004**	**919.4**
New Emission Units - 2010 Expansion Project								
New Combustion Equipment	**0.2**	**3.3**	**2.8**	**0.3**	**0.3**	**0.3**	**0.02**	**3,843**
Proposed Changes - Existing Emission Units								
PTE - Coating Lines	1,084.5	--	--	13.2	13.2	13.2	--	--
Baseline Actuals - Coating	550.0	--	--	6.7	6.7	6.7	--	--
Net Increase - Coating	**534.6**	--	--	**6.5**	**6.5**	**6.5**	--	--
PAE - Existing Combustion Units	3.4	62.3	52.3	4.7	4.7	4.7	0.4	75,241
Baseline Actuals - Combustion	2.0	35.6	29.9	2.7	2.7	2.7	0.2	42,965
Net Increase - Combustion	**1.5**	**26.7**	**22.5**	**2.0**	**2.0**	**2.0**	**0.2**	**32,276**
Total Change - 2010 Expansion Project	**536.2**	**30.0**	**25.3**	**8.8**	**8.8**	**8.8**	**0.2**	**36,119**
Total Change - 2012 Enhancement Project	**0.04**	**0.4**	**0.6**	**0.04**	**0.08**	**0.08**	**0.00**	**919**
Total Change - 2010 Expansion Project + 2012 Enhancement Project	**536.3**	**30.4**	**25.9**	**8.9**	**8.9**	**8.9**	**0.2**	**37,038**
Significant Emission Threshold (tons/year)	40	40	100	25	15	10	40	75,000
Change Significant?*	**YES**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

The 2012 enhancement project by itself is not subject to PSD, 326 IAC 2-2.

* Proposed project will result in a significant emission increase of VOC emissions only. Therefore, it is subject to review under the Prevention of Significant Deterioration (PSD) regulations

The 12 MMBtu/hr Paint Shop AHU was not included for PSD applicability purposes because it is not related to production process emissions at the plant, it will be installed to correct the building air issues at the paint shop.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100
Natural Gas

Company Name: Subaru of Indiana Automotive, Inc.
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Sourcewide Limited NG Throughput
MMCF/yr

2380.0

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	142,800	2.7	2.6
Summed Potential Emissions in tons/yr	142,805		
CO_2e Total in tons/yr	143,669		

Methodology

The N_2O Emission Factor for uncontrolled is 2.2. The N_2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO_2e (tons/yr) = CO_2 Potential Emission ton/yr x CO_2 GWP (1) + CH_4 Potential Emission ton/yr x CH_4 GWP (21) + N_2O Potential Emission ton/yr x N_2O GWP (310).

APPENDIX C

CONTROL TECHNOLOGY / PSD BACT ANALYSIS

Source Name:	Subaru of Indiana Automotive, Inc.
Source Location:	5500 State Road 38 East, Lafayette, Indiana 47903
County:	Tippecanoe
SIC Code:	3711
Operation Permit No.:	T 157-27048-00050
Operation Permit Issuance Date:	August 1, 2011
PSD/Significant Source Modification No.:	157-31885-00050
Significant Permit Modification No.:	157-31887-00050
Permit Reviewer:	Aida De Guzman

Subaru of Indiana Automotive, Inc. (SIA) submitted a permit application on May 16, 2012 relating to the proposed changes to the plant that will allow the production of new vehicle styles, allow more vehicle production on an hourly basis to achieve its permitted annual production rate of 310,000 vehicles per year while minimizing weekday overtime and/or weekend operations and allow the ability to export vehicles abroad:

(a) Body Shop - Expansion of body shop building to include a parts storage area and body shop processing area, including the following:

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

    (2) One (1) MIG welding operation, with ten (10) robotic welders, with a maximum welding rod usage of 33,000 pounds per year.

(b) Electrodeposition (ED) Paint System (Unit 001) - Increase vehicle holding/storage area. This change will not result in an increase in annual Potential to Emit (PTE). The change will fill in line gaps in subsequent operations that will allow an increase in more vehicles coated per hour, thus minimizing weekday overtime and weekend operations.

(c) Sealer Deck (Unit 002 - Sealing and PVC Undercoating Line) - Physical change includes extending the conveyor system and installing six (6) additional spray coating application systems. The change will not result in an increase in annual PTE.

(d) PVC Coating Line (Unit 002 - Sealing and PVC Undercoating Line)- Physical change includes the installation of two (2) additional spray coating application systems. The intent of the change is to accommodate a higher line speed which will allow more vehicles to be coated on an hourly basis, thus minimizing weekday overtime and weekend operations.

(e) Intermediate (Surfacer) Coating Line (Unit 004)- The physical change includes alterations to the conveyor system to add storage capacity. The intent of the change is to accommodate a higher line speed which will allow more vehicles to be coated on an hourly basis, thus minimizing weekday overtime and weekend operations.

(f) Blackout and Wax Booth (Unit 006 - Anticorrosion Coating) - Physical change includes the installation of two (2) additional spray coating systems. The change will fill in line gaps in subsequent operations that will allow an increase in more vehicles coated hourly, thus minimizing weekday overtime and weekend operations.

(g) Plastic Bumper Coating Line (Unit 005) - Physical change includes increasing the oven length to accommodate a new bumper design. This change will not result in increased emissions.

(i) Trim Line (Unit 010) - Physical change includes increasing the line speed to allow more vehicles to be coated on an hourly basis, and minimizing weekday overtime and or/weekend operations.

For PSD aggregation purposes, these proposed changes are considered to be a supplement to and a continuation of the modification permitted in PSD/SSM No. 157-29566-00050, issued on December 22, 2010, since the primary purpose of the proposed changes is to allow SIA to achieve the production levels allowed under this 2010 PSD project.

A "*modification" is defined as* any physical change, or change in the method of operation of an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted. Existing emission units (ED, Unit 001; Sealing and PVC Undercoating Line, Unit 002; Trim Line, Unit 010; and Anticorrosion Coating Unit 006 (Black and Wax Booth and Anticorrosion Coating Booth)), from the 2012 enhancement modification involve a physical modification; however, this modification will not result in an increase of the VOC PTE on a yearly basis.

BACT requirements apply to each individual new and modified emission unit and pollutant-emitting activity at which a net emissions increase would occur. The physical modification is being made to increase the line speed and will result in a PTE increase on an hourly basis, only. Although there is no increase in the annual VOC PTE, PSD BACT under 326 IAC 2-2-3(3) (PSD Rule: Control Technology Review Requirements), requirements were conservatively applied to these existing emission units.

Both the 2010 and 2012 modifications emit a total VOC of 551.3 tons per year based on the hybrid test, which is greater than the PSD significant level of 40 tons per year. The 2012 modification by itself is not subject to PSD, 326 IAC 2-2.

The BACT analysis submitted by Subaru of Indiana Automotive, Inc., and reviewed by IDEM, OAQ was based on the draft “Top-Down Approach: BACT Guidance” published by USEPA, Office of Air Quality Planning Standards, March 15, 1990. The BACT analysis was 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.

EMISSION UNITS SUBJECT TO RE-EVALUATION OF BACT	
EMISSIONS SOURCE	**DESCRIPTION**
Unit 001- Electrodeposition Coating of Vehicle Bodies (ED Coating System)	Current system using waterborne technology and oven catalytic oxidation. A physical change is being made to the vehicle buffer storage areas associated with this system. No physical changes will actually occur to the system’s dip tank or curing oven. For purposes of this application, BACT is conservatively being re-evaluated. BACT was evaluated as part of the 2010 PSD expansion project.

EMISSION UNITS SUBJECT TO RE-EVALUATION OF BACT	
EMISSIONS SOURCE	**DESCRIPTION**
Unit 002 – Sealing and PVC Undercoating Line	The PVC booth added in 1999 was subject to BACT review as part of the 2010 expansion project since it was not evaluated previously. During 1999, a vehicle production limitation, along with a more stringent VOC plant-wide emission limit, was imposed. The 2010 PSD expansion project increased the previously permitted production rate of 262,000 vehicles per year to 310,000 vehicles per year while retaining, and actually reducing, the plant-wide VOC emission limit. To address any potential concerns that this change may have a relaxation under 326 IAC 2-2-8(a), BACT for the booth added to the Sealing and PVC Undercoating Line in 1999 was evaluated as part of the 2010 PSD expansion project. For the 2012 enhancement project - Physical change includes the installation of two (2) additional spray coating applicators. The intent of the change is to accommodate a higher line speed which will allow more vehicles to be coated on an hourly basis to minimize weekday overtime and weekend operations. There is no increase in the annual VOC PTE. BACT is conservatively being re-evaluated.
Unit 010 - Trim Line	Application of adhesives and vehicle fluid fills. Changes were made to the actual conveyor system to allow for the production of 310,000 vehicles per year as part of the 2010 PSD expansion project and BACT was evaluated for that project. Several operations along this line have the potential to emit at insignificant levels. As part of this enhancement project, SIA is proposing additional changes to the conveyor system; however, it will not result in an increase in the annual PTE. For purposes of this application, BACT is conservatively being re-evaluated.
Unit 006 – Anticorrosion Coating (Black and Wax Booth)	Application of waxes to vehicles before assembly in the plant's paint shop operations. Additional two (2) spray application equipment is being added to this booth. This modification will not result in an increase in the annual PTE. BACT is conservatively being re-evaluated.
"New Emission Unit"	New operations/equipment will be installed to support the enhancement project including: (1) A new natural gas fired Body Shop AHU;

UNCONTROLLED VOC PTE SUBJECT TO BACT		
EMISSION SOURCE	**SYSTEM COMPONENTS**	**UNCONTROLLED VOC EMISSIONS (TONS/YEAR)**
Unit 001- ED Coating System	Dip / Rinse Tank	7.0
	Tanks / Oven (assumes 70% carryover)	23.4

UNCONTROLLED VOC PTE SUBJECT TO BACT

EMISSION SOURCE	SYSTEM COMPONENTS	UNCONTROLLED VOC EMISSIONS (TONS/YEAR)
Unit 002 - Sealing and PVC Undercoating Line (Does not include recent change to incorporate (Liquid Applied Sound Deadener (LASD)) application process which is not part of the 1999 project)	Fugitive (i.e., sealer deck), PVC Booths and Curing Oven	62.0 *(36.7 is available for control)
Unit 010 – Trim Line	Fugitive Emissions	17.1
Unit 006 – Anticorrosion Coating (Black and Wax Booth)	Black and Wax Booth	113.5
“New Emission Unit”	1) A new 1.73 MMBtu/hr natural gas fired AHU for the Body Shop	0.041

The PTE above reflects the PTE from the 2010 PSD/SSM 157-29655-00050 modification which will not change as a result of the proposed 2012 modification.

*Based on retention testing, the potential VOC that could be released from the Sealer and PVC system is 36.7 tons/year, which is 59%. The test showed that not all of the VOC from the materials would actually be released from the sealer deck, PVC booth or PVC curing oven. It was determined that some of the VOC is released along the paint line system, trim line and once the vehicles exit the line for external shipment.

BACT Definition and Applicability

Federal guidance on BACT requires an evaluation that follows a “top down” process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by the regulation or the permit, or the controls achieved in practice. The highest level of the control is then evaluated for technical feasibility.

The five basic steps of a top-down BACT analysis are listed below:

Step 1: Identify Potential Control Technologies

The first step is to identify potentially “available” control options for each emission unit and for each pollutant under review. Available options should consist of a comprehensive list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies, innovative technologies and controls applied to similar source categories.

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.

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)

This BACT analysis applies to each individual new and modified affected emission unit at which a net emissions increase would occur. Although there is no increase in the annual VOC PTE from the coating operation, BACT is conservatively applied to the following coating operation: Unit 001-ED Coat System, Unit 002 - Sealing and PVC Undercoating Line, Unit 010- Trim Line, Unit 006 - Anticorrosion Coating (Black and Wax Booth), Unit 006 - Anticorrosion Coating Booth, one (1) new natural gas-fired body shop air handling unit; additional engine testing of diesel engines in vehicles to be exported; one (1) new diesel storage tank to support exported vehicles; a new filling station for diesel filling in exported vehicles; and additional dynamometer testing for vehicles equipped with diesel engines that will be exported.

ED COAT SYSTEM VOC BACT Analysis

STEPS 1 AND 2 – IDENTIFICATION/ELIMINATION CONTROL TECHNOLOGIES OF VOC

(a) **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, this technology is only effective under high concentration gradients in excess of 100 ppmv and low volumes of exhaust air (i.e., typically several hundred cubic feet per minute). The exhaust streams associated with the SIA operations are very dilute consisting of many constituents and are several thousand cubic feet per minute which would preclude any effective technical applicability of a condensation system.

In conclusion, condensation technology is not considered technically feasible to reduce VOC emissions associated with the ED system. Air flow from this system would be well outside the flow range associated with condensation units. Condensation systems are therefore eliminated from further consideration in this BACT analysis because of technical infeasibility.

(b) **Carbon Adsorption** – Activated carbon beds have a track record of successful application for adsorbing specific VOC emissions. However, the application of the technology is subject to certain limitations which can negate its applicability for specific organic streams. Whenever an exhaust stream contains other contaminants such as particulates and moisture, the technology loses its efficiency. The presence of moisture and particulates in the stream will require significant gas pre-conditioning since these interferences are deleterious to the efficiency of the carbon bed. In effect, they induce a masking phenomenon reducing the available adsorption surface area.

In addition, very dilute exhaust streams would significantly impair the effective technical applicability of a carbon adsorption system which starts to collapse at inlet VOC concentration less than approximately 50 ppmv. In addition, the exhaust from the various operations would contain a highly variable complex of volatile compounds which would limit the effectiveness of carbon adsorption due to the interaction between chemical components, preferential adsorption and premature breakthrough. The desorption cycle would involve reentrainment of the VOCs unless they were further controlled by some form of an oxidization scheme.

In conclusion, carbon adsorption technology by itself is not considered technically feasible to reduce VOC emissions from the sources associated with the ED Coating System for the reasons noted above. Carbon adsorption by itself is therefore eliminated from further consideration due to technical infeasibility in this BACT analysis.

(c) **Polyad™ System** – This is an innovative system offered by a microwave technology vendor combining resin fluidized bed adsorption with microwave dynamic bed desorption that claims VOC control primarily for stripping VOCs from SVE (soil vapor extraction) units, air stripping at remediation sites, and solvent recovery. In addition to the fact that the technology does not have a track record for vehicle painting operations, there are other significant reservations regarding its technical applicability. Any adsorption system would suffer from similar limitations as those summarized below:

(1) Impaired efficiency due to dilute inlet stream concentrations as discussed earlier;
(2) Effect of interferences such as particulates, moisture and the presence of certain constituents which are particularly deleterious as discussed earlier;
(3) Reentrainment of VOCs during microwave desorption; and
(4) Microwave desorption technology is not a proven technology for application in the surface coating industry.

In conclusion, the Polyad™ adsorption/microwave desorption technology is not considered technically feasible to reduce VOC emissions from the ED Coating System, and will be eliminated from further consideration in this BACT analysis.

(d) **Flares** –Examples of flares: Open Flares and Enclosed Flares. A VOC combustion control process, in which the VOCs are piped to a remote, usually elevated location where it is burned either in an Open Flare or Enclosed Flare using a specially designed burner tip, auxiliary fuel, and 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 the type of emission sources associated with the ED Coating System due to the dilute exhaust stream and high volumes of exhaust gas air.

In conclusion, a flare is not considered to be technically feasible to reduce VOC emissions from the ED Coating System and will be eliminated from further consideration in this BACT analysis.

(e) **Biofiltration –** This is an air pollution control technology in which off-gases containing biodegradable organic compounds are vented, under controlled temperature and humidity, through a biologically active material. The microorganisms contained in the bed of compost-like material digest or biodegrade the organic to CO_2 and water. This technology has been largely utilized for control of odorous emissions with a clearly speciated air stream. The process of biofiltration utilizes a biofilm containing a population of microorganisms immobilized on a porous substrate such as peat, soil, sand, wood, compost, or numerous synthetic media. As an air stream passes through the biolfilter, the contaminants in the air stream partition from the air phases to the liquid phase of the biofilm. Once the contaminants pass into the liquid phase, they become bioavailable for complex oxidative process by the microorganisms inhabiting the biofilm. The bioscrubber is an enhancement of the biotricking filter whereby a packed tower is flooded with a liquid-phase and the discharge effluent is retained in a sump for added time to improve the microbe contact time. The advantages of a bioscrubber are as follows - no gas conditioning or humidification required, smaller footprint than other reactors, process suitable for neutralizing acids formed in-situ during treatment, and lesser interference from particulates. The disadvantages of a biofiltration system include complex feeding and neutralizing systems and the handling of toxic chemicals to control biomass growth.

Most bioreactors have large footprints, are maintenance intensive, operate in narrow bands of temperature and pressure requiring expensive gas conditioning, and have primarily been used for odor control in clearly speciated air streams. Because of the size of a biofiltration system, existing space at the plant would not be available to support this type of system.

In conclusion, due to the above operational limitations, the technology is not considered technically feasible to reduce VOC emissions from the ED Coating System, and will be eliminated from further consideration in this BACT analysis due to technical reasons.

(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 feed stream 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. There is no known application of membrane separation technology for coating systems.

In conclusion, since there is no known application of this technology for coating system, this technology is not considered technically feasible to reduce VOC emissions from the ED Coating System and will be eliminated from further consideration in this BACT analysis.

(g) **Ultraviolet (UV) Oxidation** – UV light oxidation (or photolytic destruction) of vapor-phase contaminants is accomplished by passing the off-gas in close proximity to a powerful UV light source. Oxidation occurs as a result of reactions with hydroxyl radicals produced by the UV light. The photo-oxidation usually is supplemented by a gaseous chemical oxidant (i.e., ozone) or a solid catalyst (e.g., TiO_2). The process is best used to treat easily oxidized organic compounds,

such as those with double bonds (e.g., trichloroethylene, perchloroethylene and vinyl chloride) as well as simple aromatic compounds (e.g., toluene, benzene, xylene, and phenol).
Initially, this technology emerged as a biocidal technology for water treatment since bacteria are destroyed at a wavelength of 254 nanometers. Additionally, it was recognized that the technology was also useful in cleaving and ionizing certain organics so that they are easily removed by deionization and organic scavenging cartridges in a polishing loop. This technology has been proposed for offgas treatment from SVE and other groundwater remediation units by the DOE. Based on a review of the previously listed resources including the RBLC database, there are no known applications of UV oxidization technology for coating systems. For this application, the technology suffers from the following effective technical applicability reservations:

(1) UV light frequency must be selected for maximum VOC removal based on inlet stream VOC species and concentrations. Questionable effectiveness for a matrix of volatile constituents with variable photolytic destruction isotherms, interaction between chemical constituents, preferential destruction and premature breakthroughs for non-oxidizable species;
(2) Pretreatment of inlet gas required to minimize ongoing cleaning and maintenance of UV reactor and quartz sleeves;
(3) Potential fouling of solid TiO2 catalyst by interferences such as particulates, moisture and long-chain organics;
(4) Prohibitive energy requirements to power the UV reactor in excess of competing technologies; and
(5) Extensive maintenance and calibration requirements.

In conclusion, due to the above technical applicability reservations, this technology is not considered technically feasible to reduce VOC emissions from the ED Coating System and will be eliminated from further consideration in this BACT analysis.

(h) **Non-Thermal Plasma (NTP) Technology** – NTP technology was developed by the Los Alamos National Lab for the DOD and DOE as part of a new generation of VOC control options. The intent of the research was to develop a low-cost solution with reduced energy and power requirements for controlling a host of air contaminants including VOCs. An NTP is an electrically neutral form of gas containing substantial concentrations of electrons, ions and other highly reactive free radicals which may be generated in the gas stream by application of electrical energy. In theory, the sequential chemical reactions result in the destruction of the air contaminants. Other research organizations such as Batelle have developed NTP variants such as the Gas Phase Corona Reactor (GPCR) which creates non-thermal plasma in a reactor filled with dielectic packing which significantly improves reactor performance.
The U.S Navy sought to be one of the first to install NTP technology for controlling paint booth VOC emissions. However, at this time, the technology is not "off-the shelf" and not widely commercially available in the United States. Due to the lack of commercially available equipment in the United States, the Navy was unable to procure the equipment.

In conclusion, on account of the above lack of commercial availability and proven track record in controlling VOC emissions in large coating operations, this technology is not considered technically feasible to reduce VOC emissions from the ED Coating System, and will be eliminated from further consideration in this BACT analysis.

(i) **Volume/Rotary Concentrators -** This twin part system also known as the rotary concentrator serves to concentrate the VOC's in the inlet stream prior to an adsorption or oxidation scheme. The first section consists of a slowly rotating concentrator wheel that utilizes zeolites or carbon deposited on a substrate, which adsorbs the organics as they are exhausted from the original process and passed through the wheel. A sector of the concentrator wheel is partitioned off from

the main section of the rotor and clean heated air is passed through this section to desorb the organics resulting in higher VOC concentration in a smaller gas flow.
Volume/rotary concentrators are usually installed upstream to an adsorption or oxidization configuration for ultimate VOC destruction. Further consideration of this technology including its economic, energy and environmental impacts are further discussed in the BACT analysis.

(j) **Catalytic Incineration –** Catalytic 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. In the presence of a catalyst this reaction will take place at lower temperatures than those required for thermal oxidation. Temperatures between 350 and 500 degrees Celsius are common. The catalysts are metal oxides or precious metals where they are supported on ceramic or metallic substrates. Catalytic incinerators can achieve control efficiencies of 95 to 99 percent.
From an operational standpoint, the lower reaction temperature means that the requirement for supplemental fuel is reduced or eliminated during normal operation. The lower operating temperatures will also decrease the formation of oxides of nitrogen.
In conclusion, the use of catalytic oxidation to control VOC emissions from the ED Coating System has been deemed to be technically feasible. Further consideration of this technology is provided in this BACT analysis. The economic, energy and environmental impacts associated with this technology are further discussed in the BACT analysis.

(k) **Thermal oxidation** – Thermal oxidizers 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 requirement is enough residence time to ensure essentially complete combustion. Thermal oxidizers can achieve control efficiencies of 95 to 99 percent.

In conclusion, the use of thermal oxidation to control VOC emissions from the ED Coating System has been deemed to be technically feasible. Further consideration of this technology including its economic, energy and environmental impacts are further discussed in the BACT analysis.

STEP 3 and STEP 4 – RANK REMAINING CONTROL TECHNOLOGIES and EVALUATE MOST EFFECTIVE CONTROLS

As shown in Steps 1 and 2, the remaining viable control technologies for the ED Coating System are as follows:

- Catalytic Oxidation – 95-99%
- Thermal Oxidation – 95-99%
- Volume Rotary Concentrators/Thermal Incinerator -- 85%

These technologies have been shown to be effective at reducing VOC emissions from coating systems with large volumes of air and low VOC concentration levels and can be considered feasible option for controlling VOC emissions from the ED Coating System. Therefore, the following alternative control scenarios were evaluated.

EMISSION SOURCE	TOP LEVEL OF CONTROL	VOC EMISSIONS SUBJECT TO CONTROL (TPY)	VOC CONTROL EFFICIENCY (OVERALL)
ED Dip/Rinse Tanks and Oven	Thermal Oxidation/Catalytic Oxidation/Concentrator	23.4	95%
Dip/Rinse Tanks Only	Thermal Oxidation/Catalytic Oxidation/Concentrator	7.0	28.5%

Economic Impact of VOC Control Alternatives-
In determining the economic feasibility of VOC control alternatives, guidance provided by the USEPA was utilized. The economic feasibility of a specific control alternative is generally expressed in terms of annualized dollars per ton of VOC removed. By definition, cost effectiveness is the ratio of the total annualized cost of any control alternative to the annual quantity of pollutant the alternative removes from the process.

The total capital and annualized costs for the identified control alternatives were developed based on vendor quotes for similar operations and the cost estimating structure and guidance provided in the USEPA reference, “OAQPS Control Cost Manual”, Sixth Edition, EPA 452/B-02-001 (January, 2002), other relevant information provided by the respective equipment vendors, inputs from plant personnel and engineering judgment. The various cost factors are based on guidance provided under OAQPS Manual Section 3 – VOC Controls.

Capital Recovery Factor was based on the default annual interest rate of 7% mandated by the Office of Management and Budget (OMB).

NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM ED COATING DIP/RINSE TANKS AND OVEN		
CAPITAL COSTS		
DIRECT CAPITAL COSTS (DC)		
	Gas Flow (acfm):	14,000
	Purchased Equipment Costs (PE)	
	Regenerative Thermal Oxidation System (OAQPS Budgetary Pricing Adjusted for 2010):	$462,984
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork.	
	Instrumentation (10% of Equipment, OAQPS Manual)	$46,000
	Access Way Addition (Engr. Estimate)	$25,000
	Sales Tax (3% of Equipment)	$14,000
	Freight (5% of Equipment, OAQPS Manual)	$23,000
	PE Total	$571,000
	Direct Installation Costs (DI)	
	Foundations and supports (8% of PE, OAQPS Manual)	$46,000
	Handling and erection (14% of PE, OAQPS Manual)	$80,000
	Electrical (4% of PE, OAQPS Manual)	$23,000
	Piping (2% of PE, OAQPS Manual)	$11,000
	Insulation + Painting (2% of PE, OAQPS Manual)	$11,000
	Site preparation etc. (Engr. Estimate)	$30,000
	DI Total	$201,000
	(PE+DI) DC Total	$772,000
INDIRECT CAPITAL COSTS (IC)		

NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM ED COATING DIP/RINSE TANKS AND OVEN		
	Engineering and Supervision (10% of PE, OAQPS Manual)	$57,000
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$26,000
	Contractor Fees (10% of PE, OAQPS Manual)	$57,000
	Start-up + Performance (3% of PE, OAQPS Manual)	$17,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$17,000
	IC Total	$174,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$946,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$135,000
OPERATION AND MAINTENANCE (O & M)		
DIRECT ANNUAL COSTS (DA)		
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Natural Gas Requirement (0.00835 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$364,000
	Electricity (0.003705 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$28,353
	DA Total	$415,000
INDIRECT ANNUAL COSTS (IA)		
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$38,000
	IA Total	$52,000
	(DA+IA) O & M Total	$467,000
TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)		$602,000
	Baseline VOC Emissions from the ED Coating Dip/Rinse Tanks (tons/yr)	23.41
	Annual VOC removal assuming 95% Removal Efficiency (tons)	22.23
	Annual cost effectiveness, $/ton of VOC removed	**$27,080**

Note: Cost Factors based on OAQPS Control Cost Manual (Ch. 3, 5th Ed., Dec 1995)

Natural Gas and Electricity Costs based on the Energy Information Administration

A NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM ED COATING DIP/RINSE TANKS		
CAPITAL COSTS		
DIRECT CAPITAL COSTS (DC)		
	Gas Flow (acfm):	7,000
	Purchased Equipment Costs (PE)	
	Regenerative Thermal Oxidation System (OAQPS Budgetary Pricing Adjusted for 2010):	$364,812
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork.	
	Instrumentation (10% of Equipment, OAQPS Manual)	$36,000
	Access Way Addition (Engr. Estimate)	$25,000
	Sales Tax (3% of Equipment)	$11,000
	Freight (5% of Equipment, OAQPS Manual)	$18,000
	PE Total	$455,000
	Direct Installation Costs (DI)	
	Foundations and supports (8% of PE, OAQPS Manual)	$36,000
	Handling and erection (14% of PE, OAQPS Manual)	$64,000
	Electrical (4% of PE, OAQPS Manual)	$18,000
	Piping (2% of PE, OAQPS Manual)	$9,000
	Insulation + Painting (2% of PE, OAQPS Manual)	$9,000
	Site preparation etc. (Engr. Estimate)	$30,000
	DI Total	$136,000
	(PE+DI) DC Total	$591,000
INDIRECT CAPITAL COSTS (IC)		
	Engineering and Supervision (10% of PE, OAQPS Manual)	$46,000
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$23,000
	Contractor Fees (10% of PE, OAQPS Manual)	$46,000
	Start-up + Performance (3% of PE, OAQPS Manual)	$14,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$14,000
	IC Total	$143,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$734,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$105,000
OPERATION AND MAINTENANCE (O & M)		

A NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM ED COATING DIP/RINSE TANKS		
DIRECT ANNUAL COSTS (DA)		
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Natural Gas Requirement (0.00835 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$182,000
	Electricity (0.003705 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$14,000
	DA Total	$219,000
INDIRECT ANNUAL COSTS (IA)		
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$31,000
	IA Total	$45,000
	(DA+IA) O & M Total	$264,000
TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)		$369,000
	Baseline VOC Emissions from the ED Coating Dip/Rinse Tanks (tons/yr)	7.02
	Annual VOC removal assuming 95% Removal Efficiency (tons)	6.67
	Annual cost effectiveness, $/ton of VOC removed	**$55,349**

A NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM ED Coating Oven			
CAPITAL COSTS			
	DIRECT CAPITAL COSTS (DC)		
	Gas Flow:	7,000	scfm
	Purchased Equipment Costs (PE)		
	Regenerative Thermal Oxidation System (OAQPS Budgetary Pricing Adjusted for 2010):	$364,812	
	Incinerator system with 95% regenerative heat exchanger,		

A NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery)
FOR 95% CONTROL OF VOC FROM ED Coating Oven

	housing and frame, inlet and exhaust ductwork.	
	Instrumentation (10% of Equipment, OAQPS Manual)	$36,000
	Access Way Addition (Engr. Estimate)	$25,000
	Sales Tax (3% of Equipment)	$11,000
	Freight (5% of Equipment, OAQPS Manual)	$18,000
	PE Total	$455,000
	Direct Installation Costs (DI)	
	Foundations and supports (8% of PE, OAQPS Manual)	$36,000
	Handling and erection (14% of PE, OAQPS Manual)	$64,000
	Electrical (4% of PE, OAQPS Manual)	$18,000
	Piping (2% of PE, OAQPS Manual)	$9,000
	Insulation + Painting (2% of PE, OAQPS Manual)	$9,000
	Site preparation etc. (Engr. Estimate)	$30,000
	DI Total	$136,000
	(PE+DI) DC Total	$591,000
	INDIRECT CAPITAL COSTS (IC)	
	Engineering and Supervision (10% of PE, OAQPS Manual)	$46,000
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$23,000
	Contractor Fees (10% of PE, OAQPS Manual)	$46,000
	Start-up + Performance (3% of PE, OAQPS Manual)	$14,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$14,000
	IC Total	$143,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$734,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$105,000
OPERATION AND MAINTENANCE (O & M)		
	DIRECT ANNUAL COSTS (DA)	
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Natural Gas Requirement (0.00835 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$182,000
	Electricity (0.003705 kW/ acfm flow for 8760 hrs/yr @ $0.06246/kW-hr)	$14,000

A NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM ED Coating Oven		
	DA Total	$219,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$31,000
	IA Total	$45,000
	(DA+IA) O & M Total	$264,000
	TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)	$369,000
	Baseline VOC Emissions from the ED Coating Oven (tons/yr)	16.38
	Annual VOC removal assuming 95% Removal Efficiency (tons)	15.56
	Annual cost effectiveness, $/ton of VOC removed	**$23,715**

A NEW CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM ED DIP/RINSE TANKS AND OVEN			
<u>**CAPITAL COSTS**</u>			
	DIRECT CAPITAL COSTS (DC)		
	Gas Flow:	14,000	scfm
	Purchased Equipment Costs (PE)		
	<u>Catalytic Incineration System (OAQPS Budgetary Pricing Adjusted for 2010):</u>	$341,784	
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork.		
	Instrumentation (10% of Equipment, OAQPS Manual)	$34,000	
	Access Way Addition (Engr. Estimate)	$25,000	
	Sales Tax (3% of Equipment)	$10,000	
	Freight (5% of Equipment, OAQPS Manual)	<u>$17,000</u>	
	PE Total	$428,000	
	Direct Installation Costs (DI)		
	Foundations and supports (8% of PE, OAQPS Manual)	$34,000	
	Handling and erection (14% of PE, OAQPS Manual)	$60,000	

A NEW CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM ED DIP/RINSE TANKS AND OVEN		
	Electrical (4% of PE, OAQPS Manual)	$17,000
	Piping (2% of PE, OAQPS Manual)	$9,000
	Insulation + Painting (2% of PE, OAQPS Manual)	$9,000
	Site preparation etc. (Engr. Estimate)	$30,000
	DI Total	$159,000
	(PE+DI) DC Total	$587,000
	INDIRECT CAPITAL COSTS (IC)	
	Engineering and Supervision (10% of PE, OAQPS Manual)	$43,000
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$21,000
	Contractor Fees (10% of PE, OAQPS Manual)	$43,000
	Start-up + Performance (3% of PE, OAQPS Manual)	$13,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$13,000
	IC Total	$133,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$720,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$103,000
OPERATION AND MAINTENANCE (O & M)		
	DIRECT ANNUAL COSTS (DA)	
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Catalyst Replacement ($650/ft^3 for metal oxide) - (0.001 ft^3 per acfm)	$9,100
	Natural Gas Requirement (0.002 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$87,000
	Electricity (0.0044 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$34,000
	DA Total	$153,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$29,000
	IA Total	$43,000
	(DA+IA) O & M Total	$196,000
	TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)	$301,000

A NEW CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM ED DIP/RINSE TANKS AND OVEN		
	Baseline VOC Emissions from the ED Dip/Rinse Tanks and Oven (tons/yr)	23.41
	Annual VOC removal assuming 95% Removal Efficiency (tons)	22.23
	Annual cost effectiveness, $/ton of VOC removed	**$13,540**

A NEW CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM ED DIP/RINSE TANKS			
CAPITAL COSTS			
	DIRECT CAPITAL COSTS (DC)		
	Gas Flow:	7,000	scfm
	Purchased Equipment Costs (PE)		
	Catalytic Incineration System (OAQPS Budgetary Pricing Adjusted for 2010):	$233,916	
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork.		
	Instrumentation (10% of Equipment, OAQPS Manual)	$23,000	
	Access Way Addition (Engr. Estimate)	$25,000	
	Sales Tax (3% of Equipment in Indiana)	$7,000	
	Freight (5% of Equipment, OAQPS Manual)	$12,000	
	PE Total	$301,000	
	Direct Installation Costs (DI)		
	Foundations and supports (8% of PE, OAQPS Manual)	$24,000	
	Handling and erection (14% of PE, OAQPS Manual)	$42,000	
	Electrical (4% of PE, OAQPS Manual)	$12,000	
	Piping (2% of PE, OAQPS Manual)	$6,000	
	Insulation + Painting (2% of PE, OAQPS Manual)	$6,000	
	Site preparation etc. (Engr. Estimate)	$30,000	
	DI Total	$120,000	
	(PE+DI) DC Total	$421,000	
	INDIRECT CAPITAL COSTS (IC)		
	Engineering and Supervision (10% of PE, OAQPS Manual)	$30,000	
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$15,000	
	Contractor Fees (10% of PE, OAQPS Manual)	$30,000	

A NEW CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM ED DIP/RINSE TANKS		
	Start-up + Performance (3% of PE, OAQPS Manual)	$9,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$9,000
	IC Total	$93,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$514,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$73,000
OPERATION AND MAINTENANCE (O & M)		
	DIRECT ANNUAL COSTS (DA)	
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Catalyst Replacement ($650/ft^3 for metal oxide) - (0.001 ft^3 per acfm)	$4,550
	Natural Gas Requirement (0.002 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$44,000
	Electricity (0.0044 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$17,000
	DA Total	$89,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$21,000
	IA Total	$35,000
	(DA+IA) O & M Total	$124,000
	TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)	$197,000
	Baseline VOC Emissions from the ED Dip/Rinse Tanks and Oven (tons/yr)	7.02
	Annual VOC removal assuming 95% Removal Efficiency (tons)	6.67
	Annual cost effectiveness, $/ton of VOC removed	**$29,535**

A NEW CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM ED OVEN			
CAPITAL COSTS			
	DIRECT CAPITAL COSTS (DC)		
	Gas Flow:	7,000	scfm
	Purchased Equipment Costs (PE)		
	Catalytic Incineration System (OAQPS Budgetary Pricing Adjusted for 2010):	$233,916	
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork.		
	Instrumentation (10% of Equipment, OAQPS Manual)	$23,000	
	Access Way Addition (Engr. Estimate)	$25,000	
	Sales Tax (3% of Equipment in Indiana)	$7,000	
	Freight (5% of Equipment, OAQPS Manual)	$12,000	
	PE Total	$301,000	
	Direct Installation Costs (DI)		
	Foundations and supports (8% of PE, OAQPS Manual)	$24,000	
	Handling and erection (14% of PE, OAQPS Manual)	$43,000	
	Electrical (4% of PE, OAQPS Manual)	$12,000	
	Piping (2% of PE, OAQPS Manual)	$6,000	
	Insulation + Painting (2% of PE, OAQPS Manual)	$6,000	
	Site preparation etc. (Engr. Estimate)	$30,000	
	DI Total	$121,000	
	(PE+DI) DC Total	$422,000	
	INDIRECT CAPITAL COSTS (IC)		
	Engineering and Supervision (10% of PE, OAQPS Manual)	$30,000	
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$15,000	
	Contractor Fees (10% of PE, OAQPS Manual)	$30,000	
	Start-up + Performance (3% of PE, OAQPS Manual)	$9,000	
	Over-all Contingencies (3% of PE, OAQPS Manual)	$9,000	
	IC Total	$93,000	
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$515,000	
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$73,000	
OPERATION AND MAINTENANCE (O & M)			
	DIRECT ANNUAL COSTS (DA)		
	Operating Labor:		

A NEW CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM ED OVEN		
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Catalyst Replacement ($650/ft^3 for metal oxide) - (0.001 ft^3 per acfm)	$4,550
	Natural Gas Requirement (0.002 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$44,000
	Electricity (0.0044 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$17,000
	DA Total	$89,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$21,000
	IA Total	$35,000
	(DA+IA) O & M Total	$124,000
	TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)	$197,000
	Baseline VOC Emissions from the ED Dip/Rinse Tanks and Oven (tons/yr)	16.38
	Annual VOC removal assuming 95% Removal Efficiency (tons)	15.56
	Annual cost effectiveness, $/ton of VOC removed	**$12,660**

As shown above, the cost effectiveness of using a Catalytic Incineration System or Regenerative Thermal Oxidizer (RTO) for controlling VOC emissions from the ED Coating Dip/Rinse Tanks and Oven combined, the ED Coating Dip/Rinse Tanks by itself and the ED Coating Oven by itself, ranges from $12,660 to $55,349, which is considered cost prohibitive. Therefore, additional control has been determined to not represent BACT based on economic impact. However, the VOC emissions from the ED Coating oven are currently controlled by a Catalytic Incinerator with destruction efficiency of 90% and a minimum capture of 70% from the entire ED Coating Line (ED Coating Dip/Rinse Tanks and Curing Oven).

RETROFITTING EXISTING ED COATING SYSTEM –UNIT 001 CATALYTIC INCINERATOR

The ED coating system consists of pretreatment operations, followed by the ED body coating/rinse tanks and the ED curing oven. Pursuant to the original PSD permit for the SIA plant, BACT for the ED coating system has been established as the control of VOC emissions from the ED Curing Oven only, using a Catalytic Incinerator. This incinerator is tested every 2.5 years to determine its VOC destruction efficiency.

Evaluation to retrofit the existing catalytic incinerator to control the remaining uncontrolled VOC emissions from the ED Coating Dip/Rinse Tanks and Oven was made in the 2010 PSD/SSM 157-29566-00050 and found to be not technically feasible due to the low VOC concentration. In addition, there is no increase in the annual VOC PTE from the entire ED Coating Line in this 2012 enhancement modification. Therefore, retrofitting the existing control will not be re-evaluated in this permitting action since it will result in the same outcome.

Energy Impact of VOC Control Alternatives

Incorporation of a new RTO or Catalytic Incineration system to control the VOC emissions from the ED Dip/Rinse Tanks will require increased usage of natural gas, as well as electricity.

Environmental Impact of VOC Control Alternatives

Incorporation of an RTO or Catalytic Incineration system to control VOC emissions from the ED Dip/Rinse Tanks will require increased usage of natural gas, which will result in combustion-related air pollutant emissions from the plant. Likewise, the increased usage of natural gas to support a new RTO or Catalytic Incineration system would result in additional greenhouse gas (GHG) emissions.
Incorporation of the catalytic oxidation system to further control VOC emissions from the ED Dip/Rinse tanks will require periodic replacement and disposal of the spent catalyst which represents an additional environmental impact.

Step 5 – Select BACT

The following table presents a summary of recent BACT evaluations for ED operations obtained from USEPA's RBL Clearinghouse.

ED Coating				
Date of Permit	**Facility**	**Location**	**Description**	**VOC BACT**
Proposed	Subaru of Indiana Automotive, Inc.	Lafayette, IN	Motor Vehicle Assembly Plant	**Proposed BACT:** ED Coat Line (Dip Tank/Rinse, curing oven) = continued limit of 0.4 lb/gacs, on a daily basis. ED Body Oven – Incinerator with 90%, continued capture efficiency of 70%
Current BACT				**Current BACT:** ED Coat Line (Dip Tank/Rinse, curing oven) = 0.4 lb/gacs, on a daily basis.

ED Coating				
Date of Permit	**Facility**	**Location**	**Description**	**VOC BACT**
				ED Body Oven – Incinerator with 90% destruction efficiency, capture efficiency of 70%
2/21/2012	Honda Manufacturing of Indiana, LLC	Greensburg, Indiana	Motor Vehicle Assembly Plant	**BACT -** 0.04 lb/gacs, based on a daily volume weighted average. E-Coat tank, rinse stage, and drying oven vented to RTO with 100% capture and 95% control efficiencies.
6/5/2007	Toyota Motor Manufacturing Mississippi, Inc.	Blue Springs, Mississippi	Motor Vehicle Assembly Plant	**BACT -** 0.13 lbs/ GACS and use of waterborne materials. Oven controlled by TO with 95% destruction/removal efficiency.
--	Toyota Motor Manufacturing	Princeton, Indiana	Motor Vehicle Assembly Plant	**BACT -** 2.6 lbs VOC/ GACS, less water for combined ED system and primer surfacer system.
7/27/2007	KIA Motors Manufacturing Georgia	West Point, Georgia	Motor Vehicle Assembly Plant	**BACT** - 0.1900 lb/gal monthly - applied solid. Oven controlled by RTO with 95% destruction/removal efficiency.
5/3/2007	Daimler Chrysler Corporation - Toledo Supplier Park (Paint Shop)	Toledo, Ohio	Motor Vehicle Assembly Plant	**BACT** - 0.0400 lb/gal coating solid as a vol. wt. average on a monthly basis. Vented to thermal oxidizer, natural gas-fired oven with 100% capture and 95% control efficiencies.
9/2/2004	Daimler Chrysler	Lucas County, Ohio	Motor Vehicle Assembly Plant	**BACT** - 0.04 lbs/gacs. Use of thermal incinerator
6/21/2004	Toyota Motor Manufacturing Texas	San Antonio, Texas	Motor Vehicle Assembly Plant	**BACT** - 0.13 lbs/gacs. Oven oxidation = 95% destruction/removal efficiency
10/18/2002	Honda Manufacturing of Alabama LLC	Talladega County, Alabama	Motor Vehicle Assembly Plant	**BACT -** 0.13 lbs/gacs. Oven Oxidation = 95% destruction/removal efficiency

ED Coating				
Date of Permit	**Facility**	**Location**	**Description**	**VOC BACT**
8/29/2002	General Motors Corporation - Delta Township, Michigan	Delta Township, MI (I-69 and Davis Rd.)	Motor Vehicle Assembly Plant	Use of waterborne coating with the oven exhaust routed thru RTO with a minimum destruction efficiency of 95%. **HAPS -** 0.02 lbs HAPS/gacs, 15.2 tons/yr. **BACT -** 0.04 lbs VOC/gacs
5/7/2002	Lansing Craft Centre - NAVO GM Corp	Lansing, MI	Motor Vehicle Assembly Plant	BACT - 0.04 lbs/gas. Use of formaldehyde and lead free waterborne coatings. VOC emissions from dip tank and one oven controlled by RTO #1. VOC emission from second oven controlled by RTO #2.
4/1/2002	BMW Manufacturing Corporation	Spartanburg, SC	Motor Vehicle Assembly Plant	**NSPS -** 1.42 lbs/gallon ACS, HAPS: 1.605 lb/gallon ACS, Natural gas combustion for combustion sources
10/18/2002	Hyundai Motor Manufacturing Alabama	Montgomery, Alabama	Motor Vehicle Assembly Plant	**BACT -** Water based coatings, dip tank applicator, 0.13 lb/gal acs, Paste: 1.73 lb/gal, Resin: 0.04 lb/gal, **ED Coating Oven BACT -** Natural gas only for incinerator
04/02/2001	Nissan North America, Inc.	Canton, MS	Auto and Light Duty Truck Mfg - Systems 1 and 2	Use of waterborne coating with the oven exhaust routed thru RTO with destruction efficiency 95% **NSPS -** VOC - 1.34 lbs VOC/gacs, **BACT** - 0.13 lb VOC/gacs

As shown in this table, BACT for VOC emissions from ED operations ranges from 0.04 to 0.13 lbs VOC per gallon applied coating solids (lb/gacs) with the oven emissions controlled by oxidation. The existing ED Coating Line from SIA is currently limited to 0.4 lbs/gacs. The most stringent BACT limit of 0.04 lb/gacs, with RTO at 95% destruction efficiency and capture efficiency of 100% represents newly constructed plants where design for total capture and control can be incorporated into the plant design in an economical way.

The current ED operation at the SIA plant uses dip tank waterborne coatings and the ED oven is controlled by a catalytic oxidizer. The current configuration and materials used in the ED system are unique to the SIA product and are necessary to meet SIA strict internal standards and QA requirements. SIA estimates that it would require a minimum of 2 years to complete review and initiate substitution of any of the coating materials utilized in the ED coating system. It is important to note that the system being employed and to be utilized as part of this project is an existing operation. Additional costs and issues arise when evaluating the cost effectiveness for installing a new comparable control and capture system on the existing ED Coating Line to meet the most stringent BACT, as shown in the cost analysis.

The calculated VOC emission rate expressed in lbs VOC per gallon applied coating solids is determined as follows:

VOC Content = 0.2 lbs/gallon

Solid Content by volume = 18%

Transfer Efficiency = 100%

Overall Control Efficiency = 63% (70% capture and 90% destruction)

90% Destruction Efficiency utilized based on the catalytic oxidation system being an existing system versus a more efficient new system.
0.2 lbs VOC /gallon divided by (0.18 * 100 %) X (1-0.63) = 0.4 lbs VOC/gacs

Conclusion: The PSD BACT for the ED Coating System shall continue to be limited to the following:

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

(b) The daily VOC emissions from the ED Coating Line (ED Dip/Rinse Tanks and Curing Oven) shall be limited to 0.4 pound per gallon of applied coating solids (lb/gacs).

SEALING AND PVC UNDERCOATING LINE VOC BACT ANALYSIS

The changes proposed for the 2012 enhancement project include extending the conveyor system and installing six (6) additional spray applicators associated with sealer application. Two (2) additional spray applicators will likewise be installed and used for PVC U-Coat application.

STEP 1 – IDENTIFICATION OF CONTROL TECHNOLOGIES OF VOC
The following control technologies were identified and evaluated to control VOC emissions from the Sealing and Underbody Coating Operations:

(a) Material/application technique changes:
Reductions in VOC emissions can occur through process enhancements and changes in the coating material used. Emissions of VOC are reduced by using a less volatile solvent or by replacing water in the material, and by implementing good work practices.

(b) Add-on Control Options:
(1) Condensation System
(2) Carbon Adsorption
(3) PolyadTM System
(4) Flares
(5) Volume/Rotary Concentrators
(6) Biofiltration
(7) Membrane Separation Technology
(8) Ultraviolet (UV) Oxidation
(9) Non-Thermal Plasma (NTP) Technology
(10) Catalytic Incineration
(11) Thermal oxidation

STEP 2 – ELIMINATE TECHNICALLY INFEASIBLE CONTROL OPTIONS
(a) Material/application technique changes:

(1) Process Enhancement - SIA is currently using techniques for applying sealer/undercoating materials to the plant’s vehicle body that meet the material quality control specifications as defined by SIA internal standards. Because of the type of part being coated, as well as the total number of parts being coated, SIA is committed to the paint system configuration as currently employed at the Lafayette plant.

(2) Implementation of Good Work Practices - SIA is engaged in the training of all personnel that work in the Sealing and Undercoating Line operation. This training provides each individual with a solid understanding of the coating operation. Thus, the individuals working on this Coating Line are trained in the implementation of good work practices. SIA is continuously exploring options that maximize the operation of the Coating Line while minimizing potential environmental impacts.

(b) Add-on Control Devices:

The following VOC control technologies were evaluated for applicability to the Sealing and Undercoating Line (sealer deck/booths and oven), Unit 002:

The test for technical feasibility of any control option is whether it is both available and applicable to reducing VOC emissions from automobile Sealing and PVC Undercoating operations. The previously listed information resources were consulted to determine the extent of applicability of each identified control alternative.

(1) **Condensation System** – This system utilizes a refrigerant to cool the exhaust stream, to affect 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, this technology is only effective under high concentration gradients in excess of 100 ppmv. The exhaust streams associated with the Sealing and Undercoating Line, Unit 002 are very dilute, consisting of many constituents, and high volumetric flow rates, 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 the Sealing and Undercoating Lin, Unit 002. Air flow from the paint spray system and curing oven would be well outside the flow range associated with condensation units. Therefore, a condensation system will be eliminated from further consideration in this BACT analysis.

(2) **Carbon Adsorption** – Activated carbon beds have a record of successful application for adsorbing specific VOC emissions. However, the application of the technology is subject to certain limitations which can negate its applicability for specific organic streams. Whenever an exhaust stream contains other contaminants such as particulates and moisture, the technology loses its efficiency. The presence of moisture and particulates in the stream will require significant gas pre-conditioning since these interferences are deleterious to the efficiency of the carbon bed. In effect, they induce masking on the carbon bed, thereby, reducing the available adsorption surface area.
In addition, very dilute exhaust streams would significantly impair the effective technical applicability of a carbon adsorption system which starts to collapse at inlet VOC concentration less than approximately 50 ppmv. The exhaust from the various operations would contain a highly variable complex of volatile compounds which would limit the effectiveness of carbon adsorption due to the interaction between chemical components, preferential adsorption and premature breakthrough. The desorption cycle would involve reentrainment of the VOCs unless they were further controlled by some form of an oxidization scheme.

In conclusion, carbon adsorption technology by itself is not considered technically feasible to reduce VOC emissions from the Sealing and Undercoating Line, Unit 002 for the reasons noted above. Therefore, it will be eliminated from further consideration in this BACT analysis.

(3) **PolyadTM System** – This is an innovative system offered by a microwave technology vendor combining resin fluidized bed adsorption with microwave dynamic bed desorption that claims VOC control primarily for stripping VOCs from SVE (soil vapor extraction) units, air stripping at remediation sites, and solvent recovery. In addition to the fact that this technology has not been used in controlling VOCs from vehicle painting operations, any adsorption system would suffer from similar limitations as those summarized below:

(i) Impaired efficiency due to dilute inlet air stream concentrations;
(ii) Reduction in the adsorption capacity of the system due to the presence of particulates, moisture and other constituents in the airstream;
(iii) Reentrainment of VOCs during microwave desorption; microwave desorption technology has not been applied in the surface coating industry.

In conclusion, the PolyadTM adsorption/microwave desorption technology is not considered technically feasible to reduce VOC emissions from the Sealing and Undercoating Line, Unit 002 and will be eliminated from further consideration in this BACT analysis**.**

(3) **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 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 the type of emission sources associated with the Sealing and Undercoating operations due to the large volume of air flow (i.e. > 50,000 scfm).

In conclusion, a flare is not considered to be technically feasible to reduce VOC emissions from the Sealing and Undercoating Line and will be eliminated from further consideration in this BACT analysis.

(4) **Volume/Rotary Concentrators** – This twin part system also known as the rotary concentrator serves to concentrate the VOC's in the inlet stream prior to an adsorption or oxidation scheme. The first section consists of a slowly rotating concentrator wheel that utilizes zeolites or carbon deposited on a substrate, which adsorbs the organics as they are exhausted from the process and passed through the wheel. A section of the concentrator wheel is partitioned off from the main section of the rotor and clean, heated air is passed through this section to desorb the organics resulting in a higher VOC concentration in a smaller gas flow.

Volume/rotary concentrators are usually installed upstream to an adsorption or oxidization configuration for ultimate VOC destruction. However, since the fundamental mechanism of VOC removal from the air stream is adsorption, the limitations discussed earlier for adsorption systems are present here resulting in questionable effective technical applicability.

In conclusion, the technology is considered technically feasible with some reservations to reduce VOC emissions from the automatic spray booth zones.

(5) **Biofiltration** – This is an air pollution control technology in which off-gases containing biodegradable organic compounds are vented, under controlled temperature and

humidity, through a biologically active material. The microorganisms contained in the bed of compost-like material digest or biodegrade the organic to CO_2 and water. This technology has been largely utilized for control of odorous emissions with a clearly speciated air stream. The process of biofiltration utilizes a biofilm containing a population of microorganisms immobilized on a porous substrate such as peat, soil, sand, wood, compost, or numerous synthetic media. As an air stream passes through the biolfilter, the contaminants in the air stream partition from the air phases to the liquid phase of the biofilm. Once the contaminants pass into the liquid phase, they become bioavailable for complex oxidative process by the microorganisms inhabiting the biofilm.

The bioscrubber is an enhancement of the biotrickling filter whereby a packed tower is flooded with a liquid-phase and the discharge effluent is retained in a sump for added time to improve the microbe contact time. The advantages of a bioscrubber are as follows - no gas conditioning or humidification required, smaller footprint than other reactors, process suitable for neutralizing acids formed in-situ during treatment, and less interference from particulates. The disadvantages of a biofiltration system include complex feeding and neutralizing systems and handling of toxic chemicals to control biomass growth.

Most bioreactors have large footprints, are maintenance intensive, operate in narrow bands of temperature and pressure requiring gas conditioning, and have primarily been used for odor control in clearly speciated air streams. Because of the size of a biofiltration system, existing space at the plant would not be available to support this type of system.

In conclusion, due to the above operational limitations, the technology is not considered technically feasible to reduce VOC emissions from the operations associated with the Sealing and Undercoating Line, Unit 002 and will be eliminated from further consideration in this BACT analysis.

(7) **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 similar to pumping saline water through a reverse osmosis membrane. In this system, the feed stream 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. In conclusion, there is no known application of membrane separation technology for vehicle painting operations. Therefore, it will be eliminated from further consideration in this BACT analysis.

(8) **Ultraviolet (UV) Oxidation** – UV light oxidation (or photolytic destruction) of vapor-phase contaminants is accomplished by passing the off-gas in close proximity to a powerful UV light source. Oxidation occurs as a result of reactions with hydroxyl radicals produced by the UV light. The photo-oxidation usually is supplemented by a gaseous chemical oxidant (i.e., ozone) or a solid catalyst (e.g., Titanium dioxide (TiO2)). The process is best used to treat easily oxidized organic compounds, such as those with double bonds (e.g., trichloroethylene, perchloroethylene and vinyl chloride) as well as simple aromatic compounds (e.g., toluene, benzene, xylene, and phenol).

Initially, this technology emerged as a biocidal technology for water treatment since bacteria are destroyed at a wavelength of 254 nanometers. Additionally, it was recognized that the technology was also useful in cleaving and ionizing certain organics so that they are easily removed by deionization and organic scavenging cartridges in a polishing loop. This technology has been proposed for offgas treatment from SVE and other groundwater remediation units by the DOE. Based on a review of the previously listed resources including the RBLC database, there are no known applications of UV oxidization technology for vehicle painting systems. For this application, the technology suffers from the following effective technical applicability reservations:

(i) UV light frequency must be selected for maximum VOC removal based on inlet stream VOC species and concentrations. Questionable effectiveness for a matrix of volatile constituents with variable photolytic destruction isotherms, interaction between chemical constituents, preferential destruction and premature breakthroughs for non-oxidizable species;

(ii) Pretreatment of inlet gas required to minimize ongoing cleaning and maintenance of UV reactor and quartz sleeves;

(iii) Potential fouling of solid TiO_2 catalyst by interferences such as particulates, moisture and long-chain organics;

(iv) Prohibitive energy requirements to power the UV reactor in excess of competing technologies; and

(v) Extensive maintenance and calibration requirements.

In conclusion, due to the above technical applicability reservations, this technology is not considered technically feasible to reduce VOC emissions from the Sealing and Undercoating Line, Unit 002 and will be eliminated from further consideration in this BACT analysis.

(9) **Non-Thermal Plasma (NTP) Technology** – NTP technology was developed by the Los Alamos National Lab for the DOD and DOE as part of a new generation of VOC control options. The intent of the research was to develop a low-cost solution with reduced energy and power requirements for controlling a host of air contaminants including VOCs. An NTP is an electrically neutral form of gas containing substantial concentrations of electrons, ions and other highly reactive free radicals which may be generated in the gas stream by application of electrical energy. In theory, the sequential chemical reactions result in the destruction of the air contaminants. Other research organizations such as Batelle have developed NTP variants such as the Gas Phase Corona Reactor (GPCR) which creates non-thermal plasma in a reactor filled with dielectic packing which significantly improves reactor performance.

The US Navy sought to be one of the first to install NTP technology for controlling paint booth VOC emissions. However, at this time, the technology is not “off-the shelf” and not widely commercially available in the United States. Due to the lack of commercially available equipment in the United States, the Navy was unable to procure the equipment.

In conclusion, due to the above mentioned lack of commercial availability and its unproven ability to control VOC emissions in large coating operations, this technology is not considered technically feasible to reduce VOC emissions from the Sealing and Undercoating Line, Unit 002 and will be eliminated from further consideration in this BACT analysis.

(10) **Catalytic Incineration** – Catalytic 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. In the presence of a catalyst this reaction will take place at lower temperatures than those required for thermal oxidation. Temperatures between 350 and 500 degrees Celsius are common. The catalysts are metal oxides or precious metals supported in ceramic or metallic substrates. Catalytic incinerators can achieve control efficiencies of 95 to 99 percent. From an operational standpoint, the lower reaction temperature means that the requirement for supplemental fuel is reduced or eliminated during normal operation. The lower operating temperatures will also decrease the formation of oxides of nitrogen.

In conclusion, a catalytic incinerator by itself would not be technically feasible for controlling VOC emissions from the spray booths because of the large volume of air (i.e., > 50,000 cfm) and the low VOC concentration levels. The lower VOC concentration loading in the curing ovens may make catalytic incineration questionable when trying to achieve higher VOC destruction efficiencies (i.e., >95%). It is possible to use a catalytic incinerator in conjunction with a rotary concentrator to control VOC emission from coating operations. However, in the automotive industry, a rotary concentrator or booth recirculation is typically employed with a thermal oxidizer. This control option will be further evaluated for control of VOC emissions from the Sealing and Undercoating Line, Unit 002.

(11) **Thermal oxidation** – Thermal oxidizers 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 requirement is enough residence time to ensure essentially complete combustion. Thermal oxidizers can be operated to achieve a wide range of control device efficiencies. Thermal incinerators can achieve control efficiencies of 95 to 99 percent.

Thermal oxidation has been determined to be a viable control technology for controlling VOC emissions from the Sealing and Undercoating Line, Unit 002. This technology is the preferred technology for controlling VOC emissions within the automotive industry.

In summary, thermal and catalytic oxidation, as well as a rotary carbon concentrator tied to a thermal oxidizer, are the VOC control technologies determined to be technically feasible in controlling VOC emissions from the Sealing and Undercoating Line, Unit 002.

STEP 3 – RANK REMAINING CONTROL TECHNOLOGIES

Various control alternatives were reviewed for technical feasibility in controlling VOC emissions from automobile Sealing and PVC Undercoating operations. The thermal oxidation, catalytic oxidation and rotary carbon concentrator tied to an oxidizer are the only control technologies determined to be technically feasible for controlling VOC emissions from automobile Sealing and PVC Undercoating operations. Since the overall VOC control efficiency for the rotary concentrator/oxidizer is less than that for thermal or catalytic oxidation, it was not evaluated under Step 4.

STEP 4 – EVALUATE MOST EFFECTIVE CONTROLS – SEALING AND PVC UNDERCOATING LINE

Thermal oxidation or catalytic oxidation are the most effective control devices in controlling VOC emissions from surface coating performed in automobile assembly plants. Catalytic and thermal oxidizers can achieve control device efficiencies of 95 to 99 percent.

EMISSION SOURCE	TOP LEVEL OF CONTROL	FURTHER EVALUATION REQUIRED	VOC CONTROL EFFICIENCY (OVERALL)*
Spray Booths and Oven	Thermal Oxidation/Catalytic Oxidation	YES	95%
*Spray Booths Only	Thermal Oxidation/Catalytic Oxidation	YES	57%
*Curing Oven Only	Thermal Oxidation/Catalytic Oxidation	YES	38%

*Based on 60/40% split in VOC emissions and a control device destruction efficiency of 95%.

<u>Economic Economic Impact of VOC Control Alternatives-</u>

In determining the economic feasibility of VOC control alternatives, guidance provided by the USEPA was utilized. The economic feasibility of a specific control alternative is generally expressed in terms of annualized dollars per ton of VOC removed. By definition, cost effectiveness is the ratio of the total annualized cost of any control alternative to the annual quantity of pollutant the alternative removes from the process.

A NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (BOOTHS AND OVEN)		
CAPITAL COSTS		
	DIRECT CAPITAL COSTS (DC)	
	Gas Flow (scfm):	125,350
	Purchased Equipment Costs (PE)	
	<u>Regenerative Thermal Oxidation System (OAQPS Budgetary Pricing):</u>	$1,671,000
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork.	
	Instrumentation (10% of Equipment, OAQPS Manual)	$167,000
	Access Way Addition (Engr. Estimate)	$25,000
	Sales Tax (3% of Equipment)	$50,000
	Freight (5% of Equipment, OAQPS Manual)	<u>$84,000</u>
	PE Total	$2,000,000
	Direct Installation Costs (DI)	
	Foundations and supports (8% of PE, OAQPS Manual)	$160,000
	Handling and erection (14% of PE, OAQPS Manual)	$280,000
	Electrical (4% of PE, OAQPS Manual)	$80,000
	Piping (2% of PE, OAQPS Manual)	$40,000

A NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (BOOTHS AND OVEN)		
	Insulation + Painting (2% of PE, OAQPS Manual)	$40,000
	Site preparation etc. (Engr. Estimate)	$170,000
	DI Total	$770,000
	(PE+DI) DC Total	$2,770,000
	INDIRECT CAPITAL COSTS (IC)	
	Engineering and Supervision (10% of PE, OAQPS Manual)	$200,000
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$100,000
	Contractor Fees (10% of PE, OAQPS Manual)	$200,000
	Start-up + Performance (3% of PE, OAQPS Manual)	$60,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$60,000
	IC Total	$620,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$3,390,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$483,000
OPERATION AND MAINTENANCE (O & M)		
	DIRECT ANNUAL COSTS (DA)	
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Natural Gas Requirement (0.00835 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$3,262,000
	Electricity (0.003705 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$254,000
	DA Total	$3,539,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$136,000
	IA Total	$150,000
	(DA+IA) O & M Total	$3,689,000
	TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)	$4,172,000
	Baseline VOC Emissions from the Booths and Oven (tons/yr)	36.66
	Annual VOC removal assuming 95% Removal Efficiency (tons)	34.83
	Annual cost effectiveness, $/ton of VOC removed	**$119,781**

PVC U-Coat includes PVC U-Coat UBC and PVC U-Coat sealer.

Note: Cost Factors based on OAQPS Control Cost Manual (Chapter 3, Sixth Edition (EPA 452/B-02-001))
Cost Factors for natural gas and electricity taken from U.S. Dept. of Energy - Energy Information Administration.

Natural Gas cost average of 2010/2011 cost in Indiana = $5.93

Average electricity cost for industrial users in Indiana (January 2011/January 2012) = $0.0624

REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (OVEN ONLY)		
CAPITAL COSTS		
DIRECT CAPITAL COSTS (DC)		
	Gas Flow (scfm):	12,200
	Purchased Equipment Costs (PE)	
	Regenerative Thermal Oxidation System (OAQPS Budgetary Pricing):	$362,000
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork.	
	Instrumentation (10% of Equipment, OAQPS Manual)	$36,000
	Access Way Addition (Engr. Estimate)	$25,000
	Sales Tax (3% of Equipment)	$11,000
	Freight (5% of Equipment, OAQPS Manual)	$18,000
	PE Total	$452,000
	Direct Installation Costs (DI)	
	Foundations and supports (8% of PE, OAQPS Manual)	$36,000
	Handling and erection (14% of PE, OAQPS Manual)	$63,000
	Electrical (4% of PE, OAQPS Manual)	$18,000
	Piping (2% of PE, OAQPS Manual)	$9,000
	Insulation + Painting (2% of PE, OAQPS Manual)	$9,000
	Site preparation etc. (Engr. Estimate)	$170,000
	DI Total	$305,000
	(PE+DI) DC Total	$757,000
	INDIRECT CAPITAL COSTS (IC)	
	Engineering and Supervision (10% of PE, OAQPS Manual)	$45,000
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$23,000
	Contractor Fees (10% of PE, OAQPS Manual)	$45,000
	Start-up + Performance (3% of PE, OAQPS Manual)	$14,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$14,000
	IC Total	$141,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$898,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$128,000
OPERATION AND MAINTENANCE (O & M)		

REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (OVEN ONLY)		
	DIRECT ANNUAL COSTS (DA)	
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Natural Gas Requirement (0.00835 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$318,000
	Electricity (0.003705 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$25,000
	DA Total	$366,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$31,000
	IA Total	$45,000
	(DA+IA) O & M Total	$411,000
	TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)	$539,000
	Baseline VOC Emissions from the Booths and Oven (tons/yr)	36.66
	Annual VOC removal assuming 95% Removal Efficiency (tons)	34.83
	Annual cost effectiveness, $/ton of VOC removed	**$15,475**

CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (BOOTHS AND OVEN)		
	DIRECT CAPITAL COSTS (DC)	
	Gas Flow (SCFM):	125,350
	Purchased Equipment Costs (PE)	
	Catalytic Incineration System (OAQPS Budgetary Pricing Adjusted for 2010):	$948,000
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork.	
	Instrumentation (10% of Equipment, OAQPS Manual)	$95,000
	Access Way Addition (Engr. Estimate)	$25,000
	Sales Tax (3% of Equipment in Indiana)	$28,400
	Freight (5% of Equipment, OAQPS Manual)	$47,400,

CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (BOOTHS AND OVEN)		
	PE Total	$1,144,000
	Direct Installation Costs (DI)	
	Foundations and supports (8% of PE, OAQPS Manual)	$92,000
	Handling and erection (14% of PE, OAQPS Manual)	$160,000
	Electrical (4% of PE, OAQPS Manual)	$46,000
	Piping (2% of PE, OAQPS Manual)	$23,000
	Insulation + Painting (2% of PE, OAQPS Manual)	$23,000
	Site preparation etc. (Engr. Estimate)	$170,000
	DI Total	$514,000
	(PE+DI) DC Total	$1,658,000
	INDIRECT CAPITAL COSTS (IC)	
	Engineering and Supervision (10% of PE, OAQPS Manual)	$114,000
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$57,000
	Contractor Fees (10% of PE, OAQPS Manual)	$114,000
	Start-up + Performance (3% of PE, OAQPS Manual)	$34,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$34,000
	IC Total	$354,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$2,012,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$287,000
OPERATION AND MAINTENANCE (O & M)		
	DIRECT ANNUAL COSTS (DA)	
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Catalyst Replacement ($650/ft^3 for metal oxide) - (0.001 ft^3 per acfm)	$81,478
	Natural Gas Requirement (0.002 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$781,000
	Electricity (0.0044 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$301,000
	DA Total	$1,186,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000

CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (BOOTHS AND OVEN)		
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$75,000
	IA Total	$89,000
	(DA+IA) O & M Total	$1,275,000
	TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)	$1,562,000
	Baseline VOC Emissions from the ED Dip/Rinse Tanks and Oven (tons/yr)	36.66
	Annual VOC removal assuming 95% Removal Efficiency (tons)	34.83
	Annual cost effectiveness, $/ton of VOC removed	**$44,846**

CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (OVEN ONLY)		
CAPITAL COSTS		
	DIRECT CAPITAL COSTS (DC)	
	Gas Flow (SCFM):	12,2000
	Purchased Equipment Costs (PE)	
	Catalytic Incineration System(OAQPS Budgetary Pricing adjusted for 2010):	$490,000
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork	
	Instrumentation (10% of Equipment, OAQPS Manual)	$49,000
	Access Way Addition (Engr. Estimate)	$35,000
	Sales Tax (3% of Equipment)	$15,000
	Freight (5% of Equipment, OAQPS Manual)	$25,000
	PE Total	$614,000
	Direct Installation Costs (DI)	
	Foundations and supports (8% of PE, OAQPS Manual)	$49,000
	Handling and erection (14% of PE, OAQPS Manual)	$86,000
	Electrical (4% of PE, OAQPS Manual)	$25,000
	Piping (2% of PE, OAQPS Manual)	$12,000
	Insulation + Painting (2% of PE, OAQPS Manual)	$12,000
	Site preparation etc. (Engr. Estimate)	$170,000
	DI Total	$324,000

CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (OVEN ONLY)		
	(PE+DI) DC Total	$938,000
	INDIRECT CAPITAL COSTS (IC)	
	Engineering and Supervision (10% of PE, OAQPS Manual)	$61,000
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$31,000
	Contractor Fees (10% of PE, OAQPS Manual)	$61,000
	Start-up + Performance (3% of PE, OAQPS Manual)	$18,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$18,000
	IC Total	$189,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$1,127,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$160,000
OPERATION AND MAINTENANCE (O & M)		
	DIRECT ANNUAL COSTS (DA)	
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Catalyst Replacement ($650/ft^3 for metal oxide) – (0.001 ft^3 per acfm)	$7,930
	Natural Gas Requirement (0.002 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$76,000
	Electricity (0.0044 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$29,000
	DA Total	$136,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$45,000
	IA Total	$59,000
	(DA+IA) O & M Total	$195,000
TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)		$355,000

CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM SEALING AND UNDERCOATING LINE (OVEN ONLY)		
	Baseline VOC Emissions from the Booths and Oven (tons/yr)	36.66
	Annual VOC removal assuming 95% Removal Efficiency (tons)	34.83
	Annual Cost Effectiveness, $/ton of VOC Removed	**$10,192**

Note: During the 2010 expansion project further engineering was performed by SIA to provide a better overall estimate on how much it would cost to locate and install a control device for the sealing and undercoating line. The review resulted in an engineering estimate of $170,000 for the site preparation, a lot higher than the standard site prep of $30,000 used in all the cost analysis.

As shown above, the cost effectiveness of using a Catalytic Incineration System or Regenerative Thermal Oxidizer (RTO) for controlling VOC emissions from the Sealing and Undercoating Line Booth and Curing Oven ranges from $10,192 to $119,781, which is considered cost prohibitive. Additional control has been determined to not represent BACT based on economic impact.

Energy Impact of VOC Control Alternatives

Incorporation of an RTO or a Catalytic Incineration system to control the VOC emissions from the Sealing and Undercoating Line Booth and Curing Oven will require increased usage of natural gas, as well as electricity.

Environmental Impact of VOC Control Alternatives

Incorporation of an RTO or a Catalytic Incineration system to control VOC emissions from the Sealing and Undercoating Line Booth and Curing Oven will require increased usage of natural gas, which will result in combustion-related air pollutant emissions from the plant. Likewise, the increased usage of natural gas to support an RTO or Catalytic Incineration system would result in additional emissions of greenhouse gas (GHG) emissions.

Incorporation of the catalytic oxidation system to control the VOC emissions from the Sealing and Undercoating Line Booth and Curing Oven will require periodic replacement and disposal of the spent catalyst which represents an additional environmental impact.

STEP 5 – SELECT BACT

The following Table presents a summary of recent BACT evaluations for Sealing and Undercoating operations obtained from USEPA's RACT/BACT/LAER Clearinghouse (RBLC):

SEALING AND UNDERCOATING					
Facility	**RBLC-ID**	**Permit Number**	**Permit Date**	**VOC BACT Limit**	**BACT Controls**
Proposed BACT: Subaru of Indiana Automotive	IN			VOC - 0.30 lbs/gal applied coating solids based on a daily volume weighted average	Use of low VOC content material when technically feasible and good operating/work practices

SEALING AND UNDERCOATING					
Facility	**RBLC-ID**	**Permit Number**	**Permit Date**	**VOC BACT Limit**	**BACT Controls**
Current BACT: Subaru of Indiana Automotive	IN			0.30 lb/gal coating solids based on a daily volume weighted average	Use of low VOC content material when technically feasible and good operating/work practices
*Honda Manufacturing of Alabama, LLC-Lincoln, AL	AL-0228	-	5/17/2007	Plant 1 sealer/deadener: VOC- 0.50 lb/gacs Plant 2 sealer/deadener: VOC - 0.30 lb/gacs	-
*Kia Motors Manufacturing, Georgia	GA-0130	-	7/27/2007	0.45 lb/gal monthly	-
Toyota Motor Manufacturing Mississippi, Inc.- Blue Spring MS	-	2700-00045	6/5/2007	VOC - 0.30 lbs/gal	Use of low VOC content materials/good operating work practices
*Honda Manufacturing of Indiana, LLC	IN	- PSD 031-23360-00026	10/19/2006	VOC - 0.3 lb/gal, based upon a monthly volume weighted average	Sealer Deadener Coating Line drying oven controlled by RTO #1 at 95% DRE
Daimler Chrysler - Lucas County, OH	OH-0280	04-01358	9/2/2004	VOC - 0.30 lb/gal less water	Low VOC containing materials (LAER)
Daimler Chrysler -Body Shop Ohio	OH-0277	04-01357	8/31/2004	VOC - 9.9 lb/hr and 12 tons/rolling 12-months	Low VOC sealers and adhesives
Toyota Motor Manufacturing Texas - San Antonio, Texas	--	70661 PSD-TX-1036	6/21/2004	VOC - 0.3 lb/gal coating	Bake oven with RTO at 95% DRE - Misc. Body coatings (combined sealers, adhesives and undercoat)
Hyundai Motor Mfg. - Montgomery, AL	AL-0191	209-0090-X001,X002,X003	3/23/2004	VOC - 0.3 lb/gal	RTO, VOC limits in materials
GMC Truck and Bus - Moraine Assembly Plant	OH-0295	08-02506	1/14/2003	VOC - 17.00 lb/hr VOC - 37.58 t/yr	-
*General Motors - Lansing Craft Centre - Lansing, MI	MI-0351	198-01	4/2/2002	VOC - 0.3 lb/gal (less water and exempt coatings) monthly weighted average	Low VOC containing materials
Daimler Chrysler - Sterling Heights Assembly Plant	MI-0298	269-80B	12/17/2001	VOC - 287.20 lb/day VOC - 35.90 t/yr	Low VOC, high transfer
General Motors - Delta Township - Eaton Count, MI	MI-0326	209-00	9/26/2001	VOC - 0.3 lb/gacs (Sealers and adhesives)	No methyl acetate, good housekeeping practices, waterborne

SEALING AND UNDERCOATING					
Facility	**RBLC-ID**	**Permit Number**	**Permit Date**	**VOC BACT Limit**	**BACT Controls**
					deadener material
Nissan North America, Inc	MS-0045	1720-00073	4/2/2001	VOC - 0.30 lb/gal	Low VOC solvents, good work practices
GM - Flint Assembly	MI-0250	350-97	3/26/1999	VOC - 0.30 lb/gal (LAER)	Low VOC materials, variable HAP, up to 0.3 lb/gal

Note - * Based upon actual issued permits.

The above table presents a summary of recent BACT determination from the USEPA's RACT/BACT/LAER Clearinghouse. Most of the sources in the above table have VOC BACT limit of 0.30 pound per gallon (lb/gal).

Toyota Motor Manufacturing Texas - San Antonio, Texas; Toyota Manufacturing Mississippi, Inc. - Blue Spring, Mississippi; Hyundai Motor Manufacturing. - Montgomery, Alabama; HONDA Manufacturing of Indiana, LLC - Greensburg, Indiana and HONDA Manufacturing of Alabama, LLC Plant 2 are the only sources that employ Thermal Oxidizers to meet the VOC BACT limit of 0.30 lb/gal from high VOC content materials. The rest of the sources in the above table utilize low VOC materials that meet the VOC BACT limit of 0.30 lb/gal and 0.30 lb/gacs without the use of control devices. So, while BACT is presumptively the use of a Regenerative Thermal Oxidizer (RTO), even the sources that employ VOC controls are not required to reduce emissions below 0.30 lb/gal and 0.30 lb/gacs.

As can be seen in the cost analysis, Subaru would have to spend a minimum of $10,192 per ton of VOC removed if a catalytic incineration system was installed to control VOC emissions from the Sealing and PVC Undercoating Oven. While other sources do have control equipment installed, they utilize higher VOC-containing materials resulting in more VOC removal than Subaru, further resulting in a lower cost per ton of VOC control.

Since SIA materials are water based with high solid contents, the use of a control device to destroy the VOCs is not economically feasible due to the low VOC concentration. Other high VOC-emitting operations at the SIA plant are already individually controlled by thermal/catalytic incinerators; however, there is no capacity to duct the Sealing and Undercoating Line because of its high air stream and low VOC concentration. Furthermore, material change is not an option for the non Subaru model and Subaru existing vehicles done at SIA because it will compromise quality standards (appearance and overall durability) or product specifications set for these vehicles.

Conclusion: Based on the above analysis, the PSD BACT for the Sealing and PVC Undercoating Line, identified as Line 002 shall continue to be limited to the following:

(a) The VOC emissions from the Sealing and PVC Undercoating Line, identified as Line 002 (PVC Coating Booths #1 and #2) shall not exceed 0.30 pound per gallon applied coating solids (lb/gacs), based on a daily volume weighted average.

TRIM LINE, Unit 010 VOC BACT ANALYSIS

The VOC sources in the Trim Line consist mainly of sealer and adhesive application. The total annual VOC emissions from this process are 17.4 tons per year. Adhesive and sealer applications typically occur in the open assembly area. As part of this 2012 enhancement project, SIA is making changes to the conveyor system to speed up the line to allow more vehicles to be coated on an hourly basis. This change will not result in an increase in the annual PTE; however, PSD BACT is conservatively being re-evaluated.

Steps 1 and 2 – Identification and Elimination of Technically Feasible Control Technologies

The VOC sources in the Trim Line consist mainly of sealer and adhesive application with a majority of the emission sources being classified as fugitive in nature. The application of adhesives and sealers typically occurs in the open assembly area where there are no standard enclosures. Because of the location of these operations on the trim line (open areas), it is not technically feasible to enclose these areas for capturing VOC exhaust to route to an oxidation device or other similar type VOC control. The adhesive materials used in window installation are explicitly specified by transportation standards for vehicle window installations.

Step 3 – Rank Remaining Control Technologies

As shown in Steps 1 and 2, due to the fugitive nature of the Trim Line's adhesive and sealer operations, the remaining viable control technologies for VOC emissions are best management practices and the use of low VOC materials where possible in order to meet vehicle safety standards.

Step 4 and Step 5– Evaluate Most Effective Control and Select BACT

The following table presents a summary of recent BACT determinations for the Trim Line's adhesive and sealer operation obtained from USEPA's RACT/BACT/LAER Clearinghouse (RBLC):

TRIM LINE - ADHESIVE AND SEALER OPERATION					
Facility/ RBLC ID	**State**	**Permit Date**	**Basis**	**Process**	**VOC BACT Limit**
Proposed BACT: Subaru of Indiana Automotive	IN	Proposed	BACT - PSD	Adhesive Application	**Window installation** materials = 0.40 lb/gal as applied monthly vol weighted ave. **Trim Line Adhesives excluding window installation** materials = 0.30 lb/gal as applied; monthly vol. weighted ave. No Controls
Current BACT: Subaru of Indiana Automotive	IN	Current			**Window installation** materials = 0.40 lb/gal as applied monthly vol weighted ave. **Trim Line Adhesives excluding window installation** materials = 0.30 lb/gal as applied; monthly vol. weighted ave. No Controls

TRIM LINE - ADHESIVE AND SEALER OPERATION					
Facility/ RBLC ID	**State**	**Permit Date**	**Basis**	**Process**	**VOC BACT Limit**
Honda Manufacturing of Indiana, LLC	IN	10/19/2006	BACT-PSD	Misc Operations	**Assembly install glass** - 0.40 lb/gal monthly volume weighted average of all window install materials (application of glass adhesion body primer; window primers; glass adhesive) 24.78 tons/yr as calculated **Weld Sealer –** 0.30 lb/gal monthly volume weighted average, 3.91 ton/yr VOC emissions No Controls
Daimler Chrysler Corp. Assembly Plant	OH	OH-0279	LAER	Window installation sealers and primers	0.40 lb/gal
General Motors Corporation, Moraine Assembly Plant OH-0295	OH	01/14/2003	BACT-PSD	Sealer and Adhesive Application	17 lb/hr No controls
Honda Manufacturing of Alabama, LLC	AL	10/18/02	BACT - PSD	Sealer and Adhesive Application	weld seal - 0.30 lb/gal as applied (monthly volume weighted average) Low VOC materials. No controls
GM-Delta Township - Eaton Co., MI	MI	9/26/01	BACT-PSD	Sealer and Adhesive application	0.30 lb/gacs: Sealers/adhesives (monthly volume weighted average) Standard Limit: 0.30 lb/gal

As shown, all sources in the above table do not have a control device to control VOC emissions from the sealer and adhesive application; and the BACT limit is consistently 0.40 lb/gal and 0.30 lb/gal for the window seal and weld seal, respectively.

Conclusion: Based on the above analysis, the PSD BACT for the Trim Line, identified as Unit 010 shall continue to be the following:

(a) The monthly volume weighted average of the VOC content of the adhesives 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 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.

Blackout and Wax Booth (Unit 006 - Anticorrosion Coating)

Application of waxes to vehicles before and after assembly at the plant's paint shop operations – Two (2) spray applicators are being added to the Black and Wax Booth (before vehicle assembly); and two (2) spray applicators are being added to the Anticorrosion Coating Booth (after vehicle assembly). This modification will increase the number of vehicles coated per hour but will not result in an increase to the annual PTE. BACT is conservatively being re-evaluated.

Step 1 – Identification of Control Technologies of VOC

The following control technologies were identified and evaluated to control VOC emissions from Unit 006, Anticorrosion Coating, Black and Wax Coating Operation:

(a) Material/application technique changes:
Reductions in VOC emissions can occur through process enhancement, changing the coating material being used (so that VOC emissions are reduced by using a less volatile solvent or by replacing VOC in the coating with water), and implementation of good work practices.

(b) Add-on Control Options:
- Condensation System
- Carbon Adsorption
- Polyad™ System
- Flares
- Volume/Rotary Concentrators
- Biofiltration
- Membrane Separation Technology
- Ultraviolet (UV) Oxidation
- Non-Thermal Plasma (NTP) Technology
- Catalytic Incineration
- Thermal oxidation

Step 2 – Eliminate Technically Infeasible Control Options
(a) Material/application technique changes:

(1) Process Enhancement - SIA is currently using techniques for applying wax materials to the vehicle body that meet the material quality control specification as defined by SIA internal standards. Because of the type of part being coated, as well as the total number of parts being coated, SIA is committed to the paint system configuration as currently employed at the Lafayette plant.

(2) Implementation of Good Work Practices - SIA is engaged in the training of all personnel that work in the Black and Wax booth. This training provides each individual with a solid understanding of the coating operation. Thus, the individuals working on this Coating Line are trained in the implementation of good work practices. SIA is continuously exploring options that maximize the operation of the booth while minimizing potential environmental impacts.

The following VOC control technologies were evaluated for applicability to the Black and Wax Coating Operation (booth), Unit 006:

(a) Add on ControlDevices
The test for technical feasibility of any control option is whether it is both available and applicable to reducing VOC emissions from automobile Black and Wax Coating Operation. The previously

listed information resources were consulted to determine the extent of applicability of each identified control alternative.

(1) **Condensation System** – This system utilizes a refrigerant to cool the exhaust stream, to affect 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, this technology is only effective under high concentration gradients in excess of 100 ppmv. The exhaust streams associated with the Sealing and Undercoating Line, Unit 002, are very dilute, consisting of many constituents, and high volumetric flow rates, 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 the Black and Wax Coating Operation, Unit 006. Air flow from the paint spray system would be well outside the flow range associated with condensation units. Therefore, a condensation system will be eliminated from further consideration in this BACT analysis.

(2) **Carbon Adsorption** – Activated carbon beds have a record of successful application for adsorbing specific VOC emissions. However, the application of the technology is subject to certain limitations which can negate its applicability for specific organic streams. Whenever an exhaust stream contains other contaminants such as particulates and moisture, the technology loses its efficiency. The presence of moisture and particulates in the stream requires significant gas pre-conditioning since these interferences are deleterious to the efficiency of the carbon bed. In effect, they induce masking on the carbon bed, thereby, reducing the available adsorption surface area.

In addition, very dilute exhaust streams would significantly impair the effective technical applicability of a carbon adsorption system which starts to collapse at inlet VOC concentration less than approximately 50 ppmv. The exhaust from the various operations would contain a highly variable complex of volatile compounds which would limit the effectiveness of carbon adsorption due to the interaction between chemical components, preferential adsorption and premature breakthrough. The desorption cycle would involve reentrainment of the VOCs unless they were further controlled by some form of an oxidization scheme.

In conclusion, carbon adsorption technology by itself is not considered technically feasible to reduce VOC emissions from the Black and Wax Coating Operation, Unit 006, for the reasons noted above. Therefore, it will be eliminated from further consideration in this BACT analysis.

(3) **PolyadTM System** – This is an innovative system offered by a microwave technology vendor combining resin fluidized bed adsorption with microwave dynamic bed desorption that claims VOC control primarily for stripping VOCs from SVE (soil vapor extraction) units, air stripping at remediation sites, and solvent recovery. In addition to the fact that this technology has not been used in controlling VOCs from vehicle painting operations, any adsorption system would suffer from similar limitations as those summarized below:

- Impaired efficiency due to dilute inlet air stream concentrations;
- Reduction in the adsorption capacity of the system due to the presence of particulates, moisture and other constituents in the airstream;
- Reentrainment of VOCs during microwave desorption; and Microwave desorption technology has not been applied in the surface coating industry.

In conclusion, the PolyadTM adsorption/microwave desorption technology is not considered technically feasible to reduce VOC emissions from the Black and Wax Coating Operation, Unit 006, and will be eliminated from further consideration in this BACT analysis.

(4) **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 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 the type of emission sources associated with the Sealing and Undercoating operations due to the large volume of air flow (i.e. > 50,000 scfm).

In conclusion, a flare is not considered to be technically feasible to reduce VOC emissions from the Black and Wax Coating Operation, Unit 006, and will be eliminated from further consideration in this BACT analysis.

(5) **Volume/Rotary Concentrators** – This twin part system, also known as the rotary concentrator, serves to concentrate the VOC's in the inlet stream prior to an adsorption or oxidation scheme. The first section consists of a slowly rotating concentrator wheel that utilizes zeolites or carbon deposited on a substrate, which adsorbs the organics as they are exhausted from the process and passed through the wheel. A section of the concentrator wheel is partitioned off from the main section of the rotor and clean heated air is passed through this section to desorb the organics resulting in higher VOC concentration in a smaller gas flow.

Volume/rotary concentrators are usually installed upstream to an adsorption or oxidization configuration for ultimate VOC destruction. However, since the fundamental mechanism of VOC removal from the air stream is adsorption, the limitations discussed earlier for adsorption systems are present here resulting in questionable effective technical applicability.

In conclusion, the technology is considered technically infeasible to reduce VOC emissions from this spray booth, since the booth air cannot be re-circulated based on workers present in the spray booth.

(6) **Biofiltration** – This is an air pollution control technology in which off-gases containing biodegradable organic compounds are vented, under controlled temperature and humidity, through a biologically active material. The microorganisms contained in the bed of compost-like material digest or biodegrade the organic to CO_2 and water. This technology has been largely utilized for control of odorous emissions with a clearly speciated air stream. The process of biofiltration utilizes a biofilm containing a population of microorganisms immobilized on a porous substrate such as peat, soil, sand, wood, compost, or numerous synthetic media. As an air stream passes through the biolfilter, the contaminants in the air stream partition from the air phases to the liquid phase of the biofilm. Once the contaminants pass into the liquid phase, they become bioavailable for complex oxidative process by the microorganisms inhabiting the biofilm.

The bioscrubber is an enhancement of the biotrickling filter whereby a packed tower is flooded with a liquid-phase and the discharge effluent is retained in a sump for added time to improve the microbe contact time. The advantages of a bioscrubber are as follows - no gas conditioning or humidification required, smaller footprint than other reactors, process suitable for neutralizing acids formed in-situ during treatment, and lesser interference from particulates. The disadvantages of a biofiltration system include complex feeding and neutralizing systems and the handling of toxic chemicals to control biomass growth.

Most bioreactors have large footprints, are maintenance intensive, operate in narrow bands of temperature and pressure requiring gas conditioning, and have primarily been used for odor control in clearly speciated air streams. Because of the size of a biofiltration system, existing space at the plant would not be available to support this type of system.

In conclusion, due to the above operational limitations, the technology is not considered technically feasible to reduce VOC emissions from the operations associated with the Black and Wax Coating Operation, Unit 006, and will be eliminated from further consideration in this BACT analysis.

(7) **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 similar to pumping saline water through a reverse osmosis membrane. In this system, the feed stream 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.

In conclusion, there is no known application of membrane separation technology for vehicle painting operations. Therefore, it will be eliminated from further consideration in this BACT analysis.

(8) **Ultraviolet (UV) Oxidation** – UV light oxidation (or photolytic destruction) of vapor-phase contaminants is accomplished by passing the off-gas in close proximity to a powerful UV light source. Oxidation occurs as a result of reactions with hydroxyl radicals produced by the UV light. The photo-oxidation usually is supplemented by a gaseous chemical oxidant (i.e., ozone) or a solid catalyst (e.g., Titanium dioxide (TiO_2)). The process is best used to treat easily oxidized organic compounds, such as those with double bonds (e.g., trichloroethylene, perchloroethylene and vinyl chloride) as well as simple aromatic compounds (e.g., toluene, benzene, xylene, and phenol).

Initially, this technology emerged as a biocidal technology for water treatment since bacteria are destroyed at a wavelength of 254 nanometers. Additionally, it was recognized that the technology was also useful in cleaving and ionizing certain organics so that they are easily removed by deionization and organic scavenging cartridges in a polishing loop. This technology has been proposed for offgas treatment from SVE and other groundwater remediation units by the DOE. Based on a review of the previously listed resources including the RBLC database, there are no known applications of UV oxidization technology for vehicle painting systems. For this application, the technology suffers from the following effective technical applicability reservations:

- UV light frequency must be selected for maximum VOC removal based on inlet stream VOC species and concentrations. Questionable effectiveness for a matrix of volatile constituents with variable photolytic destruction isotherms, interaction between chemical constituents, preferential destruction and premature breakthroughs for non-oxidizable species;

- Pretreatment of inlet gas required to minimize ongoing cleaning and maintenance of UV reactor and quartz sleeves;
- Potential fouling of solid TiO2 catalyst by interferences such as particulates, moisture and long-chain organics;
- Prohibitive energy requirements to power the UV reactor in excess of competing technologies; and
- Extensive maintenance and calibration requirements.

In conclusion, due to the above technical applicability reservations, this technology is not considered technically feasible to reduce VOC emissions from the Black and Wax Coating Operation, Unit 006 and will be eliminated from further consideration in this BACT analysis.

(9) **Non-Thermal Plasma (NTP) Technology** – NTP technology was developed by the Los Alamos National Lab for the DOD and DOE as part of a new generation of VOC control options. The intent of the research was to develop a low-cost solution with reduced energy and power requirements for controlling a host of air contaminants including VOCs. An NTP is an electrically neutral form of gas containing substantial concentrations of electrons, ions and other highly reactive free radicals which may be generated in the gas stream by application of electrical energy. In theory, the sequential chemical reactions result in the destruction of the air contaminants. Other research organizations such as Batelle have developed NTP variants such as the Gas Phase Corona Reactor (GPCR) which creates non-thermal plasma in a reactor filled with dielectic packing which creates non-thermal plasma in a reactor filled with dielectic packing which significantly improves reactor performance.

Step 3 – Rank Remaining Control Technologies

Various control alternatives were reviewed for technical feasibility in controlling VOC emissions from automobile Black and Wax Coating Operation. The thermal oxidation and catalytic oxidation were the only ones determined to be technically feasible for controlling VOC emissions from the Black and Wax Coating Operation.

Step 4 – Evaluate Most Effective Controls – Blackout and Wax Booth (Unit 006 - Anticorrosion Coating)

Thermal oxidation or catalytic oxidation are the most effective control devices in controlling VOC emissions from surface coating performed in automobile assembly plant. Catalytic oxidizers can achieve control device efficiencies of 95 to 99 percent. Thermal oxidizers can be operated to achieve a wide range of control efficiencies. Efficiencies of 95 percent are possible.

EMISSION SOURCE	TOP LEVEL OF CONTROL	FURTHER EVALUATION REQUIRED	VOC Control Efficiency (Overall)
Black and Wax Booth	Thermal Oxidation/Catalytic Oxidation	YES	95%

Further evaluation per EPA's top-down approach is required, including economic, energy and environmental impacts are required for controlling VOC emissions from the Black and Wax Coating Operation.

Provided below is the methodology for determining the economic, energy and environmental impacts associated with these two control technologies for reducing VOC emissions from the Black and Wax Coating Operation.

A NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM BLACK AND WAX BOOTH (UNIT 006 - ANTICORROSION COATING)		
CAPITAL COSTS		
	DIRECT CAPITAL COSTS (DC)	
	Gas Flow (scfm):	169,500
	Purchased Equipment Costs (PE)	
	Regenerative Thermal Oxidation System (OAQPS Budgetary Pricing):	$2,182,000
	Incinerator system with 95% regenerative heat exchanger, housing and frame, inlet and exhaust ductwork.	
	Instrumentation (10% of Equipment, OAQPS Manual)	$218,000
	Access Way Addition (Engr. Estimate)	$25,000
	Sales Tax (3% of Equipment)	$65,000
	Freight (5% of Equipment, OAQPS Manual)	$109,100
	PE Total	$2,600,000
	Direct Installation Costs (DI)	
	Foundations and supports (8% of PE, OAQPS Manual)	$208,000
	Handling and erection (14% of PE, OAQPS Manual)	$364,000
	Electrical (4% of PE, OAQPS Manual)	$104,000
	Piping (2% of PE, OAQPS Manual)	$52,000
	Insulation + Painting (2% of PE, OAQPS Manual)	$52,000
	Site preparation etc. (Engr. Estimate)	$30,000
	DI Total	$810,000
	(PE+DI) DC Total	$3,410,000
	INDIRECT CAPITAL COSTS (IC)	
	Engineering and Supervision (10% of PE, OAQPS Manual)	$260,000
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$130,000
	Contractor Fees (10% of PE, OAQPS Manual)	$260,000
	Start-up + Performance (3% of PE, OAQPS Manual)	$78,000
	Over-all Contingencies (3% of PE, OAQPS Manual)	$78,000
	IC Total	$806,000
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	$4,216,000
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	$600,000
OPERATION AND MAINTENANCE (O & M)		
	DIRECT ANNUAL COSTS (DA)	
	Operating Labor:	

A NEW REGENERATIVE THERMAL OXIDATION SYSTEM (w/ 70% Heat Recovery) FOR 95% CONTROL OF VOC FROM BLACK AND WAX BOOTH (UNIT 006 - ANTICORROSION COATING)		
	Operator (1 hr/day, 365 days/yr, $20/hr) + Supervisor (15% of Operator)	$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, $20/hr) + Materials (100% of Labor)	$15,000
	Natural Gas Requirement (0.00835 scfm gas/acfm exhaust air flow @$5.93/1000 ft3)	$4,411,000
	Electricity (0.003705 kW/ acfm flow for 8760 hrs/yr @ $0.0624/kW-hr)	$343,000
	DA Total	$4,777,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	$169,000
	IA Total	$183,000
	(DA+IA) O & M Total	$4,960,000
	TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)	$5,560,000
	Baseline VOC Emissions from the Booths and Oven (tons/yr)	113.5
	Annual VOC removal assuming 95% Removal Efficiency (tons)	107.83
	Annual cost effectiveness, $/ton of VOC removed	**$51,563**

CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM BLACK AND WAX BOOTH (UNIT 006 - ANTICORROSION COATING)			
	DIRECT CAPITAL COSTS (DC)		
	Gas Flow:	169,500	scfm
	Purchased Equipment Costs (PE)		
	Regenerative Thermal Oxidation System (OAQPS Budgetary Pricing):	$1,121,000	
	Incinerator system with 95% regenerative heat exchanger, housing and frame,		
	Inlet and exhaust ductwork.		
	Instrumentation (10% of Equipment, OAQPS Manual)	$112,000	
	Access Way Addition (Engr. Estimate)	$25,000	
	Sales Tax (3% of Equipment)	$34,000	
	Freight (5% of Equipment, OAQPS Manual)	$37,000	
	PE Total	$1,300,000	
	Direct Installation Costs (DI)		
	Foundations and supports (8% of PE, OAQPS Manual)	$104,000	
	Handling and erection (14% of PE, OAQPS Manual)	$182,000	
	Electrical (4% of PE, OAQPS Manual)	$52,000	
	Piping (2% of PE, OAQPS Manual)	$26,000	
	Insulation + Painting (2% of PE, OAQPS Manual)	$26,000	
	Site preparation etc. (Engr. Estimate)	$30,000	
	DI Total	$420,000	
	(PE+DI) DC Total	$1,720,000	
	INDIRECT CAPITAL COSTS (IC)		
	Engineering and Supervision (10% of PE, OAQPS Manual)	$130,000	
	Construction and Field Expenses (5% of PE, OAQPS Manual)	$65,000	
	Contractor Fees (10% of PE, OAQPS Manual)	$130,000	
	Start-up + Performance (3% of PE, OAQPS Manual)	$39,000	
	Over-all Contingencies (3% of PE, OAQPS Manual)	$39,000	
	IC Total	$403,000	
	TOTAL CAPITAL INVESTMENT (TCI) = Sum (DC + IC)	**$2,123,000**	
	Capital Recovery at 7% interest over 10 years (0.1424*TCI)	**$302,315**	

CATALYTIC INCINERATION SYSTEM FOR 95% CONTROL OF VOC FROM BLACK AND WAX BOOTH (UNIT 006 - ANTICORROSION COATING)		
OPERATION AND MAINTENANCE (O & M)		
	DIRECT ANNUAL COSTS (DA)	
	Operating Labor:	
	Operator (1 hr/day, 365 days/yr, \$20/hr) + Supervisor (15% of Operator)	\$8,000
	Maintenance:	
	Labor (1 hr/day, 365 days/yr, \$20/hr) + Materials (100% of Labor)	\$15,000
	Catalysts replacement (\$650/ft^3 for metal oxide) - (0.001 ft^3 per acfm)	\$110,175
	Natural Gas Requirement (0.002 scfm gas/acfm exhaust air flow @ \$5.93/1000 ft^3)	\$1,057,000
	Electricity (0.0044 kW/ acfm flow for 8760 hrs/yr @ \$0.0624/kW-hr)	\$408,000
	DA Total	\$1,598,000
	INDIRECT ANNUAL COSTS (IA)	
	Overhead (60% of maintenance parts & labor costs, OAQPS Manual)	\$14,000
	Admin., Property Tax, Insurance (4% of TCI, OAQPS Manual)	\$85,000
	IA Total	\$99,000
	(DA+IA) O & M Total	**\$1,697,000**
TOTAL ANNUAL CAPITAL AND O & M COSTS (including Capital Recovery)		**\$2,000,000**
	Baseline VOC Emissions from the Booth (tons/yr)	113.5
	Annual VOC removal assuming 95% Removal Efficiency (tons)	107.83
	Annual cost effectiveness, \$/ton of VOC removed	\$18,548

Note: Cost Factors based on OAQPS Control Cost Manual (Chapter 3, Sixth Edition (EPA 452/B-02-001))
Cost Factors for natural gas and electricity taken from U.S. Dept. of Energy - Energy Information Administration

Natural Gas cost average of 2010/2011 cost in Indiana = \$5.93
Average electricity cost for industrial users in Indiana (January 2011/January 2012) = \$0.0624

As can be seen in the cost analysis, SIA would have to spend a minimum of \$92,987 per ton of VOC removed if a catalytic incineration system was installed to control VOC emissions from the Anticorrosion

Coating line (black and wax booth), which is cost prohibitive. Therefore, additional control has been determined to not represent BACT based on economic impact.

Energy Impact of VOC Control Alternatives
Incorporation of an RTO or Catalytic Incineration systems to control the VOC emissions from the Black and Wax Booth will require increased usage of natural gas, as well as electricity.

Environmental Impact of VOC Control Alternatives
Incorporation of an RTO or a Catalytic Incineration system to control VOC emissions from the Black and Wax Booth will require increased usage of natural gas, which will result in combustion-related air pollutant emissions from the plant. Likewise, the increased usage of natural gas to support an RTO or Catalytic Incineration system would result in additional emissions of greenhouse gas (GHG).

Incorporation of the catalytic oxidation system would require the periodic replacement and disposal of the spent catalyst which represents an additional environmental impact.

STEP 5 – SELECT BACT
The following Table presents a summary of recent BACT evaluations for the Anticorrosion Coating Line - Black and Wax application obtained from USEPA's RACT/BACT/LAER Clearinghouse (RBLC):

Anticorrosion Coating Line - Black & Wax Booth and Anticorrosion Coating Booth				
Date of Permit	**Facility**	**Location**	**Description**	**VOC BACT**
Proposed	Subaru of Indiana Automotive	Lafayette, Indiana	Motor Vehicle Assembly Plant	Anticorrosion Coating (Black and wax Booth and Anticorrosion Coating Booth) 3 lb/gal less water
Current				Anticorrosion Coating (Black and wax Booth and Anticorrosion Coating Booth) 3 lb/gal less water
2/21/2012	Honda Manufacturing of Indiana, LLC	Greensburg, Indiana	Motor Vehicle Assembly Plant	Blackout Coating - 0.74 lbs/gal as applied Cavity Wax - 2.9 lbs/gal Good work practices
09/02/2004	Daimler-Chrysler	Lucas County, Ohio	Motor Vehicle Assembly Plant	VOC - Blackout - 1.0 lb/gal excluding water and exempt solvents
3/23/2004	Hyundai Motor Manufacturing	Montgomery, AL	Motor Vehicle Assembly Plant	Blackout - 1.0 lb/gal as applied Cavity Wax - 1.2 lb/gal as applied

Anticorrosion Coating Line - Black & Wax Booth and Anticorrosion Coating Booth				
Date of Permit	**Facility**	**Location**	**Description**	**VOC BACT**
10/18/2002	HONDA Manufacturing of Alabama, LLC	Lincoln, AL	Motor Vehicle Assembly Plant	Blackout - 1.0 lb/gal as applied
7/8/1998	FORD Motor Comp. - Wixom Assembly	Wixom, MI	Motor Vehicle Assembly Plant	Blackout - 0.74 lb/gal Wax - 2.5 lb/gal

As shown in the above table BACT for the Anticorrosion Coating Lines is the use of black and wax materials with VOC ranging from 0.74 lb/gal to 1 lb/gal for blackout and 1.2 lb/gal to 2.9 lb/gal for wax application without the use of control.

Material change is not an option for the new non-Subaru model and Subaru existing vehicles produced at SIA to meet the most stringent BACT limits because it will compromise quality standards (appearance and overall durability) or product specifications set for these vehicles. In addition, the cost to control the VOC from the application of materials in the Black and Wax Booth is between $18,548 and $51,563, which is cost prohibitive. Additional control has been determined to be not representative of BACT based on economic impact.

Based on the analysis made, the PSD BACT for the Anticorrosion Coating Operation, identified as Unit 006, shall continue to be the following:

(a) The VOC emissions, from the Anticorrosion Coating Operation, identified as Unit 006, shall be limited to 3.59 lb VOC/gal coating solids for underfloor wax; and

(b) The daily VOC emissions from Anticorrosion Coating (Black and Wax Booth and Anticorrosion Coating Booth) shall not exceed 3.0 lbs VOC/gallon of coating less water (0.36 kilograms VOC/liter of coating less water). This limit applies to the weighted average of all Anticorrosion coatings.

ONE (1) NEW BODY SHOP AIR HANDLING UNIT (ASU)

One (1) 1.73 MMBtu/hr Body Shop Air Supply Unit (AHU) is proposed to be installed for the Body Shop.

Steps 1, 2 and 3 – Identification, Elimination and Ranking of Remaining Control Technologies by Control Effectiveness

VOC emissions will be emitted from the Body Shop (ASU) as a by-product of incomplete or inefficient combustion. These VOC's may be comprised of 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 the heavier hydrocarbon constituents. The following was the only control technology identified and evaluated to control VOC from a small natural gas-fired air handling unit (less than 10 MMBtu/hr):

(a) **Good Combustion** - VOC emissions from the combustion facilities primarily result from combustion by-products of the fuel. The basic premise of good combustion technology involves premixing the fuel and air prior to entering the combustion zone, which provides for a uniform fuel/air mixture and prevents local hotspots in the combustor, thereby reducing NO_x emissions. However, the residence time of the combustion gases in these lean premixed combustors must be increased to ensure complete combustion of the fuel to minimize VOC emissions. The RACT/BACT/LAER Clearinghouse database does not show small process heaters (<10 MMBtu/hr) with any add-on control device to control VOC emissions. It identifies "good combustion" as the only control technology that has been applied for the control of VOC emissions.

Step 4 – Evaluate the Most Effective Controls and Document Results

The only technically feasible control option for the air supply unit is "good combustion control".

Combustion control is accomplished primarily through the system design and operation. Combustion efficiency is often related to the three (3) "T's" of combustion: Time, Temperature and Turbulence. These components of combustion efficiency are designed into the heaters to maximize fuel efficiency and reduce operating costs.

Good combustion generally requires the following:

(a) High temperature;

(b) Good Air/Fuel Mixing;

(c) Sufficient Excess Air; and

(d) Sufficient Residence Time.

Step 5 – Select BACT

The table below provides a summary of recent BACT determinations, as well as emission limitations being proposed by SIA for the one (1) new natural gas-fired Body Shop air supply unit associated with the proposed 2012 enhancement project.

Facility/ RBLC ID	State	Permit Date	Basis	Heat Input (MMBtu/hr)	VOC BACT Limit	Controls
Proposed BACT: Subaru of Indiana Automotive, LLC	IN	Proposed	BACT-PSD	1.73 MMBtu/hr	0.0055 lb/MMBtu	Combustion of natural gas only and good combustion practices
MGM Mirage NV-0050	NV	11/30/2009	Case-by-case	Natural gas fired water heater – 2 MMBtu/hr	0.0054 lbs/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	0.0055 lb/MMBtu	No controls feasible
Competitive Power Ventures, Inc/CPV	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

Facility/ RBLC ID	State	Permit Date	Basis	Heat Input (MMBtu/hr)	VOC BACT Limit	Controls
Maryland, LLC MD-0040						gr/100 SCF No add-on controls
Dominion Cove Point, LNG, L.P. MD-0035	MD	8/12/2005	BACT-PSD	Natural gas fired emergency vent heater- 1.3 MMBtu/hr	0.0054 lb/MMBtu	Combustion of natural gas only 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

All of the sources in the above table use natural gas for fuel with the corresponding emission factor of 5.5 pound per million cubic feet (lb/MMCF) as the VOC BACT emission limit. However, in converting this lb/MMCF VOC limit into lb/MMBtu each company used different heating value (Note: the gross heating value of natural gas is 1,150 MMBtu/MMCF and net heating value of 1,050 MMBtu/MMCF), which resulted in VOC BACT limits ranging from 0.0050 lb/MMBtu to 0.0055 lb/MMBtu.

Conclusion: Based on the above analysis, the PSD BACT for the one (1) Body Shop Air Supply Unit has been determined to be the following:

(a) The VOC emission from the one (1) 1.73 MMBtu/hr Body Shop ASU shall not exceed 0.0055 pound per million British thermal units (lb/MMBtu).

(b) The Permittee shall perform good combustion practices for the one (1) 1.73 MMBtu/hr Body Shop AHU.

(c) The one (1) 1.73 MMBtu/hr Body Shop ASU shall burn natural gas only as fuel.

AIR QUALITY ANAYSIS - APPENDIX D

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

Background

The 537 tons per year volatile organics compound (VOC) increase for this project is above the 100 tons per year threshold which triggers an analysis for ozone. Ozone is a photochemical pollutant that is not generally emitted directly from sources, but is a secondary pollutant created through complex reactions, primarily from VOCs and oxides of nitrogen (NOx). This complex chemistry is well understood but has historically presented significant challenges to the designation of particular models for assessing the impacts of individual stationary sources for the formation of this pollutant. Presently, there is no model available to accurately predict ozone concentrations resulting from emissions from a single source

Since formation of ozone takes place over 10's to 100's of kilometers downwind from sources, regional models have been developed to simulate ozone levels over large areas. These models have worked well and have been used to develop strategies for reducing VOCs and NO_x in order to attain the ozone ambient air quality standards. However, changes from additions of individual sources have not shown any impact in these regional models.

Because of the well established relationship between NO_x and VOCs, regional transport, and the formation of ozone, U.S. EPA recently finalized the Cross State Air Pollution Rule (CSAPR) to assist states in meeting the ozone National Ambient Air Quality Standards (NAAQS). This rule included extensive modeling to support the emissions reductions necessary in each state to achieve the ozone NAAQS in the eastern U.S.

U.S. EPA used a regional model, Comprehensive Air Quality Model with extensions (CAMx), and the Air Quality Assessment Tool (AQAT) to determine levels of NOx reductions necessary to achieve the NAAQS at every location. The documentation includes extensive tables showing impacts at all ozone monitors in the eastern U.S. and emission reduction levels necessary to achieve those results. To examine the possible impact of Subaru emissions, the modeling which U.S. EPA conducted to establish the final 2014 budgets in CSAPR was used for this analysis. The CSAPR website is located at http://www.epa.gov/crossstaterule/techinfo.html.

Information regarding the NOx emission reductions necessary to achieve the future year modeled design values can be found in the "EmissionsSummaries.xlsx" spreadsheet under the Emissions Inventory Final Rule TSD at EPA's CSAPR website for technical information, listed above. The spreadsheet shows the base case total annual NO_x emissions for Indiana at 455,325 tons per year in 2012 and 2014 at 431,342 tons per year, a reduction of 5.3%. VOC emissions were 323,701 tons in 2012 and 311,871 tons in 2014 in the basecase scenario, a decrease of 3.7%. In order to establish the necessary NOx reductions for CSAPR, U.S. EPA first modeled the projected 2012 base case emissions and then the projected 2014 basecase emissions. The ozone concentrations produced by these modeling runs were then compared site by site. To complete the CSAPR modeling, U.S. EPA then incorporated additional NOx reductions in 2014 necessary to meet the ozone standards. No VOC reductions beyond the 2012 and 2014 projections were modeled. The analysis contained in this section compares the 2012 basecase results with the 2014 basecase results.

8-Hour Ozone Modeling Results

The nearest ozone monitor to Subaru is located in Flora, Indiana, approximately 20 miles northeast (generally downwind). In the tables accompanying the U.S. EPA modeling results, the projected basecase scenario resulted in modeled ozone concentrations at Flora of 66.4 ppb in 2012 and 64.9 ppb in 2014. This reduction of 1.5 ppb is due, at least in part, to the state-wide 5.3% NOx and 3.7% VOC reductions. Assuming that equal volumes of NOx and VOC contribute equally to ozone formation, this amount of VOC reduction contributed about 40% of the total ozone reduction, or about 0.6 ppb of the total 1.5 ppb reduction. Table 1 shows the modeling results from the CSAPR modeling runs.

Table 1: EPA's Cross-State Air Pollution Rule 8-Hour Ozone Modeling Results

Monitor ID	County	2012 Base (ppb)	2014 Base (ppb)	2014 Base-Reduction (ppb)
180150002	Carroll	66.4	64.9	1.5

The projected 2012 and 2014 emissions and resulting ozone concentrations were based upon 2005 emission inventories, which were the best information available for that modeling. While the data is somewhat dated, the relative difference in ozone concentrations is the important information and can be applied to more current data.

Because of the regional nature of ozone formation, it is difficult to put an increase in emissions from one source in perspective, but some conclusions can be drawn by comparing the Subaru VOC emissions increase to area-wide VOC emissions, and then comparing that to the CSAPR modeling results. Emissions from several counties in Indiana and Illinois, as well as other states, impact the Flora monitor. To be conservative for this analysis, no emissions for other states or biogenic emissions are included, just the anthropogenic VOC emissions from Tippecanoe and all immediately surrounding counties are considered.

In this case, there is no significant increase in NOx from Subaru. For VOC's, IDEM has calculated that emissions from all area, non-road, mobile, and point sources in Tippecanoe County and the six counties immediately adjacent amount to 17,204 tons per year, in 2009. 2009 is the latest inventory year available. Therefore, the VOC increase of 543 tons per year from Subaru would amount to an increase of 3.2% for the area. This is slightly less than the 3.7% state-wide change in VOCs calculated above, which resulted in a 0.6 ppb change in ozone concentrations at the Flora monitor. If the VOCs from Subaru are fully reacted by the time they reach the Flora monitor, it can be assumed that the ozone concentration would be increased by somewhat less than 0.6 ppb. It should be noted that the method detection level for ozone monitors is 0.5 ppb, so this difference is barely measureable.

Conclusion

Table 2 shows the monitored ozone concentrations from Flora since 2006. The NAAQS for ozone is calculated as the fourth highest yearly eight-hour value averaged over a three year period. The NAAQS for ozone is 0.075 ppm (75 ppb).

Table 2. Flora Eight Hour Ozone Averages (PPB)

Year	1st	Date	2nd	Date	3rd	Date	4th	Date	3 Year Period	Site Design Value
2006	76	6/17	75	6/15	75	6/16	**73**	6/6		
2007	85	9/21	82	5/22	80	5/23	**78**	9/5		
2008	69	4/23	68	6/20	66	7/17	**65**	9/2	(06-08 avg)	**72**
2009	66	5/22	65	5/20	64	5/24	**63**	6/26	(07-09 avg)	**68**
2010	76	8/20	74	5/30	72	7/3	**72**	4/14	(08-10 avg)	**66**
2011	77	6/8	69	9/1	68	9/2	**68**	6/17	(09-11 avg)	**67**

With the current design value of 67 ppb, adding 0.6 ppb from the impact of Subaru, the NAAQS for ozone will not be exceeded.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Tippecanoe County Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Subaru of Indiana
Permit Number: 157-31885-00050

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or 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.

Enclosures
Final Library.dot 11/30/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO:

Denise Coogan
Subaru of Indiana
POB 5689
Lafayette, IN 47903

DATE: October 4, 2012

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Title V
157-31885-00050

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Thomas Easterday, Responsible Official
Steven Frey, ARCADIS, Consultant
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	DPABST 10/4/2012 Subaru of Indiana Automotive, Inc. (SIA) 157-31885-00050 & 157-31887-00050 (Final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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2		Thomas Easterday Executive VP Subaru of Indiana Automotive, Inc. (SIA) 5500 SR 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. Dorothy Whicker 2700 Bonny Lane Lafayette IN 47904 *(Affected Party)*									
8		Ms. Geneva Werner 3212 Longlois Drive Lafayette IN 47904-1718 *(Affected Party)*									
9		Mrs. Phyllis Owens 3600 Cypress Lane Lafayette IN 47905 *(Affected Party)*									
10		Mr. Jerry White 1901 King Eider Ct West Lafayette IN 47906 *(Affected Party)*									
11		Ms. Rose Filley 5839 Lookout Drive West Lafayette IN 47906 *(Affected Party)*									
12		Mr. William Cramer 128 Seminole Drive West Lafayette IN 47906 *(Affected Party)*									
13		Mr. Robert Kelley 2555 S 30th Street Lafayette IN 44909 (Affected Party)									
14		West Lafayette City Council and Mayors Office 609 W. Navajo West Lafayette IN 47906 *(Local Official)*									
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