Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53 IGCN 1003
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: September 18, 2007

RE: Honda of America Mfg, Inc. / 031-24760-00026

FROM: Nisha Sizemore
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 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, 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 4-21.5-3-7 and IC 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, 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-MOD.dot 03/23/06

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
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September 18, 2007

Ms. Karen Heyob
Honda of America Mfg., Inc.
24000 Honda Parkway
Marysville, OH 43040

Re: 031-24760-00026
First Significant Source Modification to:
PSD/Part 70 permit No.: T031-23360-00026

Dear Ms. Heyob:

Honda Manufacturing Of Indiana, LLC was issued PSD/Part 70 operating permit T031-23360-00026 on October 19, 2006 for an automotive and light-duty truck assembly facility. An application to modify the permit to reflect changes to the plant design which includes new units, and revisions to existing unit designations to several emission units was received on May 4, 2007. See attached TSD documents for requested changes. Pursuant to 326 IAC 2-7-10.5, the requested changes are approved.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to <u>any</u> 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. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year 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 source modification authorizes changes to the plant design which includes new units, and revisions to existing unit designations to several emission units. Operating conditions shall be incorporated into the PSD/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 Jamal Naas or extension 4-5176, or dial (317) 234-5176.

Sincerely,

September 18, 2007

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments

JNN

cc: File – Decatur County
Decatur County Health Department
IDEM Air Compliance Section Inspector
Compliance Data Section
Administrative and Development

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Prevention of Significant Deterioration (PSD)/PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY

Honda Manufacturing of Indiana, LLC
2755 N. Michigan Ave.
Greensburg, Indiana 47240

(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 approval.

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

Significant Source Modification No. 031-24760-00026	
Issued by: Original signed by Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date:September 18, 2007

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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(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates an automotive and light-duty truck assembly plant.

Source Address:	2755 N. Michigan Ave.,Greensburg, IN 47240
Mailing Address:	c/o Honda of America MFG., Inc., 24000 Honda Parkway, Marysville, OH 43040
General Source Phone Number:	(937) 644-7757
SIC Code:	3711, 3714
County Location:	Decatur County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Major Source, Section 112 of the Clean Air Act

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) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

(A) Multistage pretreatment/Phosphate Process, identified as PA-01 IA.

(B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID 1100.

(C) One (1) E-Coat pre-heat zone, with a maximum heat input capacity of 3.7MMBtu/hr, exhausting to stack ID 1003.

(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of five oven zones, each with a heat input capacity of 3.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(E) One (1) cooling tunnel, exhausting to stack ID 1006.

(2) Sealer Deadener Coating Line, identified as PA-03, with a capacity of 73 units per hour, consisting of one (1) automatic and manual sealer deadener application area, and one (1) sound deadener booth, using airless spray application system, exhausting to stack ID 1007.

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(A) One (1) Primer/Surfacer spray coating booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system and dry filters to control particulate overspray, exhausting to stack ID 1014 and stack ID 1015.

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, one with a maximum heat input capacity of 3.5 MMBtu/hr and one with a maximum heat input capacity of 2.6 MMBtu/hr.

(C) One (1) natural gas-fired Primer/Surfacer 5-stage oven tunnel, which consists of five (5) zones, oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(D) One (1) oven exit hood exhaust, exhausting to stack ID 1021.

(E) One (1) cooling tunnel, exhausting to stack ID 1022.

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(A) Two (2) basecoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash systems and dry filters to control particulate overspray, exhausting to stack ID 1032 and stack ID 1043.

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of 2.6 MMBtu/hr, exhausting to stack ID 1033 and stack ID 1044.

(C) Two (2) clearcoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems. The automatic zones use water/oil emulsion wash systems to control particulate overspray and the manual zones use dry filters. The manual zones are cascaded to the automatic zones, and the automatic zones are controlled by one (1) RTO, identified as RTO #2 with stack ID 1101.

(D) One (1) natural gas-fired Topcoat 5-stage oven tunnel, which consists of five (5) zones, oven zone #1, with a heat input capacity of 3.5 MMBtu/hr, oven zone #2, with a heat input capacity of 2.6 MMBtu/hr, and oven zones #3, #4 and #5 , each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(E) One (1) cooling tunnel, exhausting to stack ID 1041.

(F) One (1) oven exit hood exhaust, exhausting to stack ID 1037.

(G) Topcoat on-line repair, identified as PA-07 which includes:

(i) One (1) repair sanding booth, identified as PA-08 controlled by dust filters, exhausting to stack ID 1056.

(ii) One (1) repair coating booth using water/oil emulsion wash system to control particulate overspray, exhausting to stack ID 1057.
(iii) One(1) natural gas-fired repair oven, with a maximum heat input capacity of 2.6 MMBtu/hr, exhausting to stack ID 1058.
(iv) One (1) cooling tunnel, exhausting to stack ID 1060.
(v) One (1) small repair booth, exhausting to stack ID 1055, with infrared curing that consists of three (3) banks of portable infrared lights.

(H) Air makeup units as follows:

(i) Two (2) natural gas-fired air makeup units, for the Topcoat Lines #1 and #2 basecoat booths, each equipped with a two-stage burner, each with a combined maximum heat input capacity of 9.2 MMBtu/hr.

(ii) Two (2) natural gas-fired air makeup units, for Topcoat Lines #1 and #2 clearcoat booths, each equipped with a two-stage burner, each with a combined maximum heat input capacity of 5.8 MMBtu/hr.

(iii) One (1) natural gas-fired air makeup unit, for the topcoat on-line repair operations, equipped with a two-stage burner, with a combined maximum heat input capacity of 12.2 MMBtu/hr.

(iv) One (1) natural gas-fired air makeup unit, for the primer/surfacer line, equipped with a two-stage burner, with a combined maximum heat input capacity of 7.8 MMBtu/hr.

(5) Blackout/Cavity wax coating booth, identified as PA-11, equipped with dry filters, exhausting to stack ID 1062.

(6) Miscellaneous cleaning and purge operation – paint operations, consisting of the following:

(A) Purge and clean-up solvent usage and recovery system, identified as PA-14, including virgin solvent distribution, day tanks, small portable containers including containers that meet the definition of cold cleaners, and spent solvent recovery.

(B) One (1) virgin purge solvent storage tank, identified as PA-18, located outside the paint department, with a capacity of 7,000 gallons.

(C) One (1) spent purge solvent storage tank, identified as PA-19, located outside the paint department, with a capacity of 7,000 gallons.

(7) Paint effluent system, identified as PA-17, consisting of sludge for separation of paint solids form booth water/oil emulsion wash systems for body and plastic parts painting. Solids are chemically separated and sent off-site. Water/oil emulsion is recycled to paint booths or sent to wastewater treatment.

(8) One (1) natural gas-fired air makeup unit, with a maximum heat input capacity of 20.0 MMBtu/hr, identified as PA-21.

(9) One (1) natural gas-fired air makeup unit, with a maximum heat input capacity of 8.0 MMBtu/hr, identified as PA-22.

(10) One (1) natural gas -fired makeup unit with a maximum heat input capacity of 5.0 MMBtu/hr, identified as PA-23.

(11) Two (2) natural gas-fired HVAC units, identified as PA-24 and PA-25, each with a maximum heat input capacity of 13.0 MMBtu/hr.

(12) One (1) natural gas-fired HVAC unit, with a maximum heat input capacity of 8.00 MMBtu/hr, identified as PA-26.

(b) Plastics Operations:

(1) Plastic Parts Coating Line, identified as PO-02, with a capacity of 120 hangers per hour, consisting of the following:

(A) Alkaline pretreatment process, identified as PO-01.

(B) One (1) dry-off tunnel, exhausting to stack ID 2000.

(C) One (1) primer spray booth, utilizing High Volume Low Pressure (HVLP) and/or electrostatic application systems, using water/oil emulsion wash to control particulate overspray, exhausting to stack ID 2002.

(D) One (1) basecoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray. If waterborne basecoat is utilized, the basecoat spray booth will exhaust to stack ID 2003 and stack ID 2004. If solventborne basecoat is utilized, the basecoat spray booth will be controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

(E) One clearcoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray, and VOC emissions controlled by one (1) RTO, with a maximum heat input capacity of 14.00 MMBtu/hr, identified as RTO #3, with stack ID 2029.

(F) One (1) clearcoat flashoff area.

(G) One (1) plastic parts oven tunnel which consists of two (2) zones with one (1) 2.6 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

(H) One (1) natural gas-fired air makeup unit, equipped with a two-stage burner, with a combined maximum heat input capacity of 19.0 MMBtu/hr.

(2) Miscellaneous cleaning and purge operation – plastics painting, consisting of the following:

(A) Purge and clean-up solvent usage and recovery system, identified as PO-05, including virgin solvent distribution, day tanks, small portable containers including containers that meet the definition of cold cleaners, and spent solvent recovery.

(B) One (1) virgin purge solvent storage tank, identified as PO-09, located outside the plastics department, with a capacity of 7,000 gallons.

(C) One (1) spent purge solvent storage tank, identified as PO-10, located outside the plastics department, with a capacity of 7,000 gallons.

(3) Three (3) plastic parts injection molding machines, identified as PO-06, PO-07, and PO-08, with a combined maximum throughput of 4,050 pounds per hour plastic pellets.

(4) Three (3) plastic pellets storage silos, storage #1 is identified as PO-11, storage #2 is identified as PO-12 and storage #3 is identified as PO-18.

(5) One (1) Plastic parts touchup booth, identified as PO-17, using dry filters for particulate control and manual application systems.

(6) Two (2) painted/raw plastic parts regrind machines, identified as PO-15 and PO-16.

(7) Two (2) plastic flash torches, with a maximum heat input capacity of 0.10 MMBtu/hr each, identified as PO-14 and PO-19.

(c) Final Assembly Operations:

(1) Assembly window install and miscellaneous operations, identified as AF-01, with a capacity of 70 units per hour, consisting of all coatings, sealers, lubricants and related cleaning solvents used for auto assembly, including processes used to install window glass in vehicles, including body primer, glass cleaner, glass primer, and glass adhesive. Includes robotic and manual application equipment, coating delivery/circulation systems and raw material storage containers.

(2) Gasoline dispensing operation, with a capacity of 70 units per hour, consisting of the following:

(A) Gasoline dispensing equipment, identified as AF-02, located at the assembly line, for filling new vehicles. Stage 2 vapor recovery control will be utilized, either through onboard Stage 2 vapor recovery or separate Stage 2 vapor recovery system.

(B) Two (2) gasoline storage tanks, identified as FAC-99 and FAC-100, located at the tank farm, each with a capacity of 19,800 gallons, each equipped with submerged fill and Stage 1 vapor balance.

(d) Weld sealer process using manual and robotic weld sealer application equipment, material delivery systems and raw material storage, identified as WE-01.

(e) Two (2) diesel fired emergency generators, identified as FAC-84 and FAC-85, each with a rated capacity of 500 kilowatts (kw).

(f) One (1) diesel fired back-up generator, identified as FAC-86, with a rated capacity equal to or less than 100 kilowatts (Kw).

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

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

(a) Painting Operations:

(1) E-Coat sanding and inspection booth, identified as PA-04, using dry filters for particulate control, exhausting to general ventilation.

(2) Primer/Surfacer sanding and inspection booth, identified as PA-06, using dry filters for particulate control, exhausting to general ventilation.

(3) Topcoat in-line repair, which includes repair area for small interior topcoat, imperfections, manual application equipment, identified as PA-09.

(4) Topcoat manual sanding and inspection area, identified as PA-10.

(5) One (1) plastic coating line masking booth.

(6) One (1) plastic coating line air blow booth.

(7) Final Repair, identified as PA-12, which includes repair coating booths and general areas, using manual application systems, and IR curing equipment.

(8) Final Repair - Air Dry, identified as PA-13, using air dry materials and manual application system.

(9) Paint Mix Rooms (Emissions accounted for in the emission determinations at each respective source).

(10) One (1) Plastic parts touchup booth, identified as PO-17, using dry filters for particulate control and manual application systems.

(b) 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) One (1) natural gas-fired hot water heater (FAC-110) for the purpose of supplying hot water to the café kitchen, with a combined maximum heat input capacity of 0.50 MMBtu/hr.

(2) Four (4) natural gas-fired hot water generators, located in the body painting area, with a combined maximum heat input capacity of 24.5 MMBtu/hr.

(3) One (1) natural gas-fired air makeup unit for the Primer/Surfacer sanding and inspection booth (PA-06), with a maximum heat input capacity of 6.4 MMBtu/hr.

(4) Twenty-eight (28) natural gas-fired space heaters (FAC-53 through FAC-80), with a combined maximum heat input capacity of 3.4 MMBtu/hr.

(5) Natural gas-fired HVAC units (FAC-01 through FAC-07, FAC-11 through FAC-20, FAC-26 through FAC-30, FAC-32, FAC-35 through FAC-37, FAC-39 through FAC-41, FAC-43 through FAC-52, FAC-146, FAC-147 and FAC-170), with a combined maximum heat input capacity of 97.5 MMBtu/hr.

(6) Forty three (43) natural gas-fired space heaters (FAC-117 through FAC-130, FAC-133 through FAC-139, FAC-148 through FAC-150 and FAC-151 through FAC-169), with a combined maximum heat input capacity of 6.9 MMBtu/hr.

(7) Four (4) natural gas-fired HVAC units (FAC-116, FAC-131, FAC-132 and FAC-140), with a combined maximum heat input capacity of 2.2 MMBtu/hr.

(c) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

(A) Two (2) diesel fuel storage tanks for fire pumps, identified as FAC-93 and FAC-94, each with a capacity of 300 gallons, each equipped with submerged fill.

(B) Three (3) diesel fuel storage tanks for generators, identified as FAC-95, FAC-177 and FAC-178, each with a capacity of 150 gallons.

(2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(d) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.

(1) Periodic application of rust preventive oils to body steel for corrosion protection, identified as WE-03.

(e) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(f) Cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100^{o}F).

(g) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment:

(1) One (1) Stamping Shop - Four (4) press stamping lines, stamped parts repair and die maintenance activities, including hand held grinders, sanders, files, portable MIG welding, arc, welding, and stick welding.

(2) Body welding and finishing, identified as WE-02, using resistance welding and grinding, and MIG welding stations. The SR station "Stationary Robots" and back-up MIG welding and grinding operations are controlled by cartridge filters.

(3) Portable MIG, arc and TIG welding, identified as WE-06.

(h) Infrared cure equipment.

(i) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(1) Industrial WWT operations, identified as FAC-112, for pretreatment for metals removal using a chemical precipitation process.

(j) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.

(k) Noncontact cooling tower systems with forced and/or induced draft cooling tower system not regulated under a NESHAP.

(1) One (1) forced draft chiller cooling tower, identified as FAC-105, with a capacity of 20,000 gallons per minute.

(2) One (1) forced draft air compressor cooling tower, identified as FAC-107, with a capacity of 940 gallons per minute.

(l) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(m) Heat exchanger cleaning and repair.

(n) Process vessel degreasing and cleaning to prepare for internal repairs.

(o) Paved and unpaved roads and parking lots with public access.

(p) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(q) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(r) On-site fire and emergency response training approved by the department.

(s) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower.

(1) One (1) substation emergency generator, identified as FAC-81, with a capacity of 81 kilowatts (kw).

(2) One (1) Consolidation Center emergency generator, identified as FAC-89, with a capacity of 81 kilowatts (kw).

(3) One (1) Credit Union building emergency generator, identified as FAC-115, with a capacity of 81 kilowatts (kw).

(t) Other emergency equipment as follows: Stationary fire pumps.

(1) Two (2) stationary fire pumps, identified as FAC-82 and FAC-83, each with a rated capacity of 183 horsepower.

(u) Emergency generators as follows: Gasoline generators not exceeding 110 horsepower.

(1) Two (2) emergency generators, identified as FAC-145 and FAC-175, with a capacity of 3.0 kilowatts (kw) each.

(v) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(w) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(1) One (1) wheelabrator unit, identified as PA-15.

(x) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(1) One (1) paint test lab, identified as PA-16, with a capacity of 15 panels per hour.

(y) Enclosed systems for conveying plastic raw materials and plastic finished goods as defined in 326 IAC 2-7-1(21)(G).

(z) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 26 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) Windshield washer fluid fill operation, with a capacity of 70 units per hour, consisting of the following:

(A) Water/methanol fluid mixing and dispensing equipment, identified as AF-03, located at the assembly line, for filling new vehicles.

(B) One (1) windshield washer fluid storage tank, identified as FAC-102, located at the tank farm, with a capacity of 2,000 gallons, equipped with submerged fill.

(2) The following tanks, located at the Tank Farm:

(A) One (1) automatic transmission fluid storage tank, identified as FAC-96, with a capacity of 10,000 gallons, equipped with submerged fill.

(B) One (1) antifreeze storage tank, identified as FAC-103, with a capacity of 10,000 gallons, equipped with submerged fill.

(C) One (1) brake fluid storage tank, identified as FAC-98, with a capacity of 2,000 gallons, equipped with submerged fill.

(D) One (1) power steering fluid storage tank, identified as FAC-101, with a capacity of 2,000 gallons, equipped with submerged fill.

(E) One (1) manual transmission fluid storage tank, identified as FAC-104, with a capacity of 2,000 gallons, equipped with submerged fill.

(F) One (1) diesel fuel storage tank for yard truck operations, identified as MS-01, with a capacity of 3,000 gallons, equipped with submerged fill.

(3) The following tank, located at the Utility Building:

(A) One (1) diesel fuel storage tank, identified as FAC-90, with a capacity of 2,000 gallons, equipped with submerged fill.

(4) One (1) compressed natural gas tank, identified as AF-04, for filling CNG vehicles.

(5) Eight (8) cold cleaner degreasers, identified as ST-02, MS-02, WE-07, AF-05, VQ-01, PA-27, PO-20 and FAC-176, located at designated areas.

(6) One (1) BPA Polish booth, identified as PO-04, consisting of manual air tools for scuffing, polishing, and buffing painted plastic parts.

(aa) General List of Trivial/Insignificant Activities

(1) Water related activities including:

(A) Production of hot water for on-site personal use not related to any industrial or production process.
(B) Cooling ponds.
(C) Pressure washing of equipment.
(D) Water jet cutting operations.

(2) Combustion Activities including the following:

(A) Portable electrical generators that can be moved by hand from one location to another.
(B) Fuel use related to food preparation for on-site consumption.
(C) Combustion emissions from propulsion of mobile sources.
(D) Tobacco smoking rooms and areas.
(E) Indoor and outdoor kerosene heaters.

(3) Ventilation and venting related equipment including the following:

(A) Stacks and vents from plumbing traps used to prevent the discharge of sewer gases, handling domestic sewage only, excluding those at wastewater treatment plants or those handling any industrial waste.

(B) Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.

(C) Air vents from air compressors.

(D) Ventilation exhaust, central chiller water systems, refrigeration and air conditioning equipment, not related to any industrial or production process, including natural draft hoods, or ventilating systems that do not remove air pollutants.

(4) Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process including the following:

(A) Activities associated to routine fabrication, maintenance of paved and unpaved rods, including paving or sealing, or both, of parking lots and roadways.

(B) Painting including interior and exterior painting of buildings, and solvents use, excluding degreasing utilizing halogenated solvents.

(C) Brazing, soldering, or welding operation and associated equipment.

(D) Batteries and battery charging stations, except at battery manufacturing plants.

(E) Lubrications, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.

(F) Non-asbestos insulation installation or removal.

(G) Tarring, retarring and repair of building roofs.

(5) Activities performed using hand-held equipment including the following:

- Buffing	- Carving	- Cutting, excluding cutting torches
- Drilling	- Routing	- Surface grinding
- Grinding	- Sanding	- Turning wood, metal or plastic
- Polishing	- Surface grinding-	
- Sawing	- Machining wood, metal or plastic	

(6) Housekeeping and janitorial activities and supplies including the following:

(A) vacuum cleaning systems used exclusively for housekeeping or custodial activities or both.
(B) Restrooms and associated cleanup operations and supplies.
(C) Alkaline or phosphate cleaners and associated equipment.
(D) Mobile floor sweepers and floor scrubbers.
(E) Pest control fumigation.

(7) Office related including the following:

(A) Office supplies and equipment.
(B) Photocopying equipment and associated supplies.
(C) Paper shredding.
(D) Blueprint machines, photographic equipment, and associated supplies.

(8) Sampling and testing equipment and activities including the following:

(A) Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.

(B) Sampling activities including: Sampling of waste.

(C) Instrument air dryers and distribution.

(9) Storage equipment and activities including:

(A) Pressurized storage tanks and associated piping for inorganic compounds, acetylene, liquid natural gas (LNG), propane as liquid petroleum gas (LPG), carbon dioxide (CO2) and natural gas.

(B) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP.

(i) One (1) sulfuric acid storage tank, identified as FAC-109.

(C) Storage of drums containing maintenance raw materials.

(D) Portable container used for the collection, storage, or disposal of materials provided the container capacity is equal to or less than 0.46

cubic meters and the container is closed except when the material is added or removed.

(10) Emergency and standby equipment including:

(A) Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.

(B) Process safety relief devices installed solely for the purpose of minimizing injury to persons or damage to equipment which could result from abnormal process operating conditions, including the following:

(i) Explosion relief vents, diaphragms or panels.
(ii) Rupture discs.
(iii) Safety relief valves.

(C) Activities and equipment associated with on-site medical care not otherwise specifically regulated.

(D) Vacuum producing devices for the purpose of removing potential accidental releases.

(11) Activities associated with production including the following:

(A) Electrical resistance welding.
(B) Drop hammers or hydraulic presses for forging or metalworking.
(C) Air compressors and pneumatically operated equipment, including hand tools.
(D) Compressor or pump lubrication and seal systems.
(E) Handling of solid steel, including coils and slabs, excluding scrap burning, scarfing, and charging into steel making furnaces and vessels.

(12) Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following:

(A) Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOCs and HAPs.
(B) Condensate drains for natural gas and landfill gas.
(C) Manual loading and unloading operations.
(D) Construction and demolition operations.
(E) Non-volatile mold release waxes and agents

(13) Lawn care and landscape maintenance activities and equipment, including the storage, spraying or application of insecticides, pesticides and herbicides.

(14) Use of consumer products and equipment where the product or equipment is used at a source in the same manner as normal consumer use and is not associated with any production process.

(15) Activities generating limited amounts of fugitive dust including: Road salting and sanding.

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 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 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.

B.4 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality

B.5 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, T 031-23360-00026, 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.6 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.7 Enforceability [326 IAC 2-7-7]

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.8 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.9 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.10 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. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). 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.11 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) The "responsible official" is defined at 326 IAC 2-7-1(34).

B.12 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent 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 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days upon start up of manufacturing operation, 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 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) 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 or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) 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.14 Emergency Provisions [326 IAC 2-7-16]

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

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

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

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

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

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

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

(A) A description of the emergency;

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "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)(9) 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.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

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

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

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

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

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

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

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

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

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

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

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

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

B.16 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.17 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.18 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 the certification by the "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.19 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, 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 the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, 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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.20 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

(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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "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.21 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 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.22 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),(c), or (e) 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
Permits 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, 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), (c)(1), and (e)(2).

(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 in 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.23 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2] [326 IAC 2-3]

(a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and/or 326 IAC 2-3-2.

B.24 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.25 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "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.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

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

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

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

B.27 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 5-1-3 (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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

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

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

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 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 Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, 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 certification by the "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 certification by the "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)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of start up of manufacturing operation. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 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 the certification by the "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.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.12 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.13 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 prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

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

within 180 days from the date on which this source commences operation.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) 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.14 Risk Management Plan [326 IAC 2-7-5(12)] [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.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.

(b) 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). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.16 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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) 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 the certification by the "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.17 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]

(a) 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 the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

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

C.18 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. 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, all record keeping requirements not already legally required shall be implemented when operation begins.

(c) If there is a “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) affecting an existing emissions unit, other than 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) and/or 326 IAC 2-3-1 (z)) and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1 (rr) and/or 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) 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(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii)); and
(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(2) 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

(3) 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.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. 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.

(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) 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 (xx) and/or 326 IAC 2-3-1 (qq), 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).

(g) The report for project at an existing emissions unit shall be submitted within 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 (c)(2) and (3) 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 deems fit to include in this report,

Reports required in this part shall be submitted to:

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

(h) 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.20 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 the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Source-Wide Operations

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

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

Pursuant to 326 IAC 2-2-3 (BACT), the proposed automobile and light-duty truck assembly plant shall be limited as follows:

(a) The plant's production rate shall be limited to 250,000 vehicles per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The total VOC usage from all surface coating operations; E-Coat Line (PA-02), Sealer/Deadener (PA-03), Primer/Surfacer (PA-05), Topcoat Coating Line and On-Line Repair (PA-07), Blackout/Cavity Wax Coating Line (PA-11), and Plastic Parts, shall be limited such that the total VOC emissions shall not exceed 330.2 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with paragraph (a) of this condition is also necessary to render PSD not applicable for CO and SO_2 emissions.

Compliance Determination Requirement

D.1.2 Prevention of Significant Deterioration (PSD) VOC BACT limits [326 IAC 2-2]

Compliance with the VOC limit in Condition D.1.1 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:

Body Painting VOC Emissions (tons/month) = E-Coat Line (PA-02) + Sealer/Deadener (PA-03) + Primer/Surfacer (PA-05) + Topcoat Coating Line and On-Line Repair (PA-07) + Blackout/Cavity Wax Coating Line (PA-11) + Plastic Parts VOC

D.1.3 Regenerative Thermal Oxidizers (RTOs) [326 IAC 2-2]

(a) In order to demonstrate compliance with Condition D.1.1 and the requirements of 326 IAC 2-2-3 (BACT), the regenerative thermal oxidizers (RTOs) shall operate at all times when the processes being controlled are in operation.

(b) The bypass line for each capture system shall not be used to divert emissions away from the RTOs to the atmosphere, but shall only be used for VOC purge to prevent fire prior to the coating operation, and during cleaning operations, other non-standard equipment testing and non-production times when air supply houses remain in operation. If emissions occur from testing, cleaning and other activities, those emissions must be tracked separately.

(c) All paint lines exhausting any emissions to an RTO shall be equipped with "system interlocks" as safety features, which shall automatically shut down all related conveyors and spray equipment if air flow is diverted by a bypass line away from the RTO.

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

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

D.1.4 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the automobile and light duty truck production limit, and the VOC emission limit established in Condition D.1.1(b). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The VOC content of each coating material and solvent used.

(2) The amount of coating material and solvent used on a monthly basis.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(3) The total VOC usage and emissions from coatings and solvents for each month.

(4) The number of vehicles produced each month.

(b) To comply with Condition D.1.3, any shut down event shall be recorded for investigation to countermeasure against future occurrences, and be kept on file for at least the past five (5) year period and made available upon request to IDEM, OAQ.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.5 Reporting Requirements

(a) Reports of monthly vehicle production totals shall be submitted to IDEM, OAQ on a quarterly basis to comply with Conditions D.1.1(a). These reports shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

(b) Reports of monthly VOC emissions from body surface coating operations shall be submitted to IDEM, OAQ on a quarterly basis to comply with Condition D.1.1(b). These reports shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

(A) Multistage pretreatment/Phosphate Process, identified as PA-01 IA.

(B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID 1100.

(C) One (1) E-Coat pre-heat zone, with a maximum heat input capacity of 3.7 MMBtu/hr, exhausting to stack ID 1003.

(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of five (5) oven zones, each with a heat input capacity of 3.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(E) One (1) cooling tunnel, exhausting to stack ID 1006.

(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]

Pursuant to 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the E-Coat Coating Line, ID PA-02, shall be as follows:

(a) The exhausts from the E-Coat tank, rinse stage, and drying oven shall be vented to regenerative thermal oxidizer RTO#1 (with stack ID 1100), and shall have a capture system efficiency of 100%. The regenerative thermal oxidizers shall achieve a minimum VOC destruction efficiency of 95%.

(b) The VOC emissions, after control, from the E-Coat Coating Line ID PA-02, shall not exceed 0.04 pound per gallon of applied coating solids (lb/gacs), based on a daily volume weighted average.

(c) The PSD BACT requirements for the combustion facilities in SECTION D.2, are contained in SECTION D.10.

D.2.2 Volatile Organic Compounds [326 IAC 8-2-2]

Pursuant to 326 IAC 8-2-2, the combined VOC delivered to the applicators from prime application, involving the Electrodeposition (E-Coat) Coating Line ID PA-02, and Primer/Surfacer Coating line ID PA-05 in SECTION D.3, including the flash-off area, and drying oven shall not exceed 0.23 kilogram per liter of coating (1.9 pounds per gallon), excluding water.

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.2.4 Regenerative Thermal Oxidizers (RTOs) [326 IAC 2-2] [326 IAC 8-2-2]

The exhausts from the E-coat tank, rinse stages and drying oven shall be vented to regenerative thermal oxidizer RTO#1 (with stack ID 1100) at all times when the E-Coat Coating Line (PA-02) is in operation.

D.2.5 Volatile Organic Compounds [326 IAC 8-2-2] [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a), the combined VOC emission limitations under 326 IAC 8-2-2 in Condition D.2.2, for the Electrodeposition (E-Coat) Coating Line (PA-02), and the Primer/Surfacer Coating line (PA-05) in SECTION D.3, shall be achieved through one (1) or any combination of the following: thermal incineration, use of higher solids (low solvent) coatings, and/or waterborne coatings.

D.2.6 Testing Requirements [326 IAC 2-2] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the the E-Coat Coating Line (PA-02), Primer/Surfacer Coating Line (PA-05) in SECTION D.3, the Topcoat Coating Operation (PA-07) in SECTION D.4, and the Sealer Deadener (PA-03) in SECTION D.3, the Permittee shall conduct initial performance tests of the E-Coat Coating Line (PA-02) (E-Coat tank, rinse stages, and drying oven), Primer/Surfacer Coating Line (PA-05) (drying oven) in SECTION D.3, the Topcoat Coating Operation (PA-07) (drying oven) in SECTION D.4, and the Sealer Deadener (PA-03) (drying oven) in SECTION D.3, to determine compliance with the limits on VOC emissions, capture efficiency, and destruction efficiency of the regenerative thermal oxidizer (RTO#1 with stack ID 1100), utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

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

(a) Compliance with the VOC content and usage limitations contained in Conditions D.2.1 and D.2.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) Compliance with the PSD BACT limit in D.2.1(b) shall be determined using daily volume weighted average of the coating solids consumed and actual transfer efficiencies and shall be determined using the following equation:

$$DWA = \frac{\sum_{i=1}^{n} (Ci)(Ui) \times (1-(CE \times DRE))}{\sum_{i=1}^{n} (Si \times TE)}$$

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 (100% for the E-Coat)
n = no. of coatings used during the day
CE = capture efficiency of the emission system vented to the RTO
DRE =destruction/removal efficiency of the RTO

(c) Compliance with the VOC limitation in Condition D.2.2 shall be determined using a daily volume weighted average of the coatings applied less water using the following equation:

$$A = \frac{\sum_{i=1}^{n} (Ci)(Ui) \times (1-(CE \times DRE))}{\sum_{i=1}^{n} (Ui \times (1-Di))}$$

where:
A = daily volume weighted average, lb VOC/gal less water
C = VOC content of coating i, lb VOC/gal
U = actual coating i usage, gal/day
D = coating i volume % water
n = no. of coatings used during the day
CE = capture efficiency of the emission system vented to the RTO
DRE =destruction/removal efficiency of the RTO

D.2.8 Regenerative Thermal Oxidizers (RTOs) Temperature [326 IAC 2-2] [326 IAC 8-2-2]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the Electrodeposition (E-Coat) Coating Line ID PA-02 regenerative thermal oxidizer (RTO#1 with stack ID 1100) for measuring operating temperature. For the purposes of this condition, continuous shall mean no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the three (3) hour rolling average operating temperature of the thermal oxidizer shall be maintained at a minimum temperature of 1400^{o}F.

(b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with the limits in conditions D.2.1 and D.2.2, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the three (3) hour rolling average temperature as observed during the compliant stack test.

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

D.2.9 Parametric Monitoring [326 IAC 8-2-2]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in condition D.2.1 and D.2.2, as approved by IDEM.

(b) The equipment to measure duct pressure or fan amperage shall be equipped with “system interlocks”, which shall automatically shutdown the affected paint operations if duct pressure or fan amperage is outside the normal range established in the most recent compliant stack test.

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

D.2.10 Record Keeping Requirements [326 IAC 8-2-2]

(a) To document compliance with Condition D.2.1(b), 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.2.1(b). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the E-Coat tank.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) A log of the dates of use.

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

(4) The calculated daily volume weighted average emission in pounds per gallon coating solids as applied from the E-Coat tank.

(b) To document compliance with Condition D.2.2, 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.2.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the E-Coat tank and the Primer/Surfacer Coating Line ID PA-05 in SECTION D.3.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) A log of the dates of use.

(3) The water content of each coating material used (as applied).

(4) The calculated daily volume weighted average VOC content per gallon of the coatings less water as applied from the E-Coat tank and the Primer/Surfacer Coating Line (PA-05) in SECTION D.3.

(c) To document compliance with Condition D.2.9, the Permittee shall maintain records of the continuous temperature records (on a three-hour average basis) for the E-Coat Coating Line ID PA-02 regenerative thermal oxidizer (RTO#1 with stack ID 1100) and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(d) All records shall be maintained and available upon a request for inspection by the IDEM, OAQ and shall be in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.11 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.2.1 shall be submitted quarterly to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(2) Sealer Deadener Coating Line, identified as PA-03, with a capacity of 73 units per hour, consisting of the following:

(A) One (1) automatic and manual sealer deadener application area, and one (1) sound deadener booth, using airless spray application system, exhausting to stack ID 1007.

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(A) One (1) Primer/Surfacer spray coating booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system and dry filters to control particulate overspray, exhausting to stack ID 1014 and stack ID 1015.

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, one (1) with a maximum heat input capacity of 3.5 MMBtu/hr and one (1) with a maximum heat input capacity of 2.6 MMBtu/hr.

(C) One (1) natural gas-fired Primer/Surfacer 5-stage oven tunnel, which consists of five (5) zones, oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(D) One (1) oven exit hood exhaust, exhausting to stack ID 1021.

(E) One (1) cooling tunnel, exhausting to stack ID 1022.

(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) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3, the VOC Best Available Control Technology (PSD BACT) for the Primer/Surfacer Coating line, identified as PA-05, shall be as follows:

(a) The exhaust from the Primer/Surfacer Coating line drying oven shall be vented to regenerative thermal oxidizer RTO#1 (with stack ID 1100). The thermal oxidizer shall achieve a minimum VOC destruction efficiency of 95%.

(b) The VOC emissions, from the Primer/Surfacer Coating Line (including controlled and uncontrolled emissions), identified as PA-05, shall not exceed 3.46 pound per gallon of applied coating solids (lb/gacs), based on a daily volume weighted average.

(c) The VOC emissions, from the Sealer Deadener Coating Line (including controlled and uncontrolled emissions), identified as PA-03, shall not exceed 0.30 pounds of VOC per gallon of coating (lb/gal) used, based on a monthly volume weighted average.

(d) The PSD BACT requirements for the combustion facilities in SECTION D.3, are contained in SECTION D.10.

D.3.2 Volatile Organic Compounds [326 IAC 8-2-2]

Pursuant to 326 IAC 8-2-2, the combined VOC delivered to the applicators from prime application, involving the Primer/Surfacer Coating line (PA-05), and Electrodeposition (E-Coat) Coating Line (PA-02) in SECTION D.2, including the flash-off area, and drying oven shall not exceed 0.23 kilogram per liter of coating (1.9 pounds per gallon), excluding water.

D.3.3 PSD BACT for PM and PM10 [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the PM and PM10 emissions from the water/oil emulsion wash system and dry filters controlling the particulate emissions from the Primer/Surfacer Coating Line (PA-05) shall be limited to 0.0015 grains per standard cubic foot (gr/scf) of exhaust air, and 99% control efficiency. The Department may revise this permit to adjust the PM and PM10 limitation of 0.0015 gr/scf based upon the results of the stack test required in Condition D.3.7. PM-10 includes filterable and condensible PM-10. Any revisions of the emissions limits made as the result of this provision shall be subject to the best available control technology (BACT) review and air quality analysis, specified in 326 IAC 2-2. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (revocation or Modification of a Permit: appeal to Board) shall apply to this permit condition.

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.3.5 Regenerative Thermal Oxidizers (RTOs) [326 IAC 2-2] [326 IAC 8-2-2]

The exhaust from the Primer/Surfacer Coating Line (PA-05) shall be vented to regenerative thermal oxidizer RTO#1 (with stack ID 1100) at all times when the line is in operation.

D.3.6 Volatile Organic Compounds [326 IAC 8-2-2] [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a), the combined VOC emission limitations under 326 IAC 8-2-2 in Condition D.3.2, for the Primer/Surfacer Coating line (PA-05) and Electrodeposition (E-Coat) Coating Line (PA-02) in SECTION D.2, shall be achieved through one (1) or any combination of the following: thermal incineration, use of higher solids (low solvent) coatings, and/or waterborne coatings.

D.3.7 Testing Requirements [326 IAC 2-2] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the Primer/Surfacer Coating Line (PA-05), the E-Coat Coating Line (PA-02) in Section D.2, the Topcoat Coating Operation (PA-07) in SECTION D.4, and the Sealer Deadener (PA-03) in this SECTION D.3, the Permittee shall conduct initial performance tests of the Primer/Surfacer Coating Line (PA-05) (oven), the E-Coat Coating Line (PA-02) (E-Coat tank, rinse stages, and oven) in Section D.2, and the Topcoat Coating Operation (PA-07) (two drying ovens) in SECTION D.4, to determine compliance with the limits on VOC emissions, capture efficiency, and destruction efficiency of the regenerative thermal oxidizer (RTO#1 with stack ID 1100), and applicators transfer efficiencies, utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

(b) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of Primer/Surfacer Coating Line PA-05, in order to demonstrate compliance with Condition D.3.3, the Permittee shall conduct initial performance tests to measure the PM/PM10 emission rates in grains per standard cubic feet of exhaust air of the water/oil emulsion wash and dry filters controlling the Primer/Surfacer coating booth, utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.3.8 Volatile Organic Compounds (VOC) [326 IAC 2-2] [326 IAC 8-2-2]

(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) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) Compliance with the PSD BACT limit in D.3.1(b) shall be determined using daily volume weighted average of the coating solids consumed and actual transfer efficiencies and shall be determined using the following equation:

$$DWA = \frac{\sum_{i=1}^{n} (C_i)(U_i) \times (1-(CE \times DRE))}{\sum_{i=1}^{n} (S_i \times TE)}$$

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
n = no. of coatings used during the day
CE = capture efficiency of the emission system vented to the RTO
DRE =destruction or removal efficiency of the RTO

(c) Compliance with the VOC limitation in Condition D.3.1(c) shall be determined using monthly volume weighted average of the coating used using the following equation:

$$DWA = \frac{\sum_{i=1}^{n} (C_i)(U_i) \times (1-(CE \times DRE))}{\sum_{i=1}^{n} U_i}$$

where:
DWA = monthly calculated volume weighted average emissions in pounds per gallon coating applied.
C = VOC content of coating $_i$, lb VOC/gal

U = actual coating $_i$ usage, gal/month
n = no. of coatings used during the month
CE = capture efficiency of the emission system vented to the RTO
DRE =destruction or removal efficiency of the RTO

(d) Compliance with the VOC limitation in Condition D.3.2 shall be determined using a daily volume weighted average of the coatings applied less water using the following equation:

$$A = \frac{\sum_{i=1}^{n} (C_i)(U_i) \times (1-(CE \times DRE))}{\sum_{i=1}^{n} (U_i \times (1-D_i))}$$

where:
A = daily volume weighted average, lb VOC/gal less water
C = VOC content of coating $_i$, lb VOC/gal
U = actual coating $_i$ usage, gal/day
D = coating $_i$ volume % water
n = no. of coatings used during the day
CE = capture efficiency of the emission system vented to the RTO
DRE =destruction or removal efficiency of the RTO

D.3.9 Regenerative Thermal Oxidizers (RTOs) Temperature [326 IAC 2-2] [326 IAC 8-2-2]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the Primer/Surfacer Coating line ID PA-05 thermal oxidizer (RTO#1 with stack ID 1100) for measuring operating temperature. For purposes of this condition, continuous shall mean no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the three (3) hour rolling average operating temperature of the thermal oxidizer shall be maintained at a minimum temperature of 1400^{o}F.

(b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in conditions D.3.1 and D.3.2, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the three (3) hour rolling average temperature as observed during the compliant stack test.

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

D.3.10 Water/Oil Emulsion Wash and dry filters Monitoring

(a) Daily inspection shall be performed prior to the paint booth's operation to verify the proper placement and configuration of the baffle panels of the water/oil emulsion wash system and dry filters. Daily inspections shall be performed during the paint booth's operation to verify the proper flow of water/oil through the water/oil pan of the water/oil emulsion wash system that affect water/oil pan capture efficiency (e.g., debris in the water/oil pans). To monitor the performance of the water/oil emulsion wash and dry filters, weekly observations shall be made of the overspray from the Primer/Surfacer Coating line (PA-05) stacks (ID 1014 and ID 1016) while the paint booth is in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.3.11 Parametric Monitoring [326 IAC 8-2-2]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in condition D.3.1 and D.3.2, as approved by IDEM.

(b) The equipment to measure duct pressure or fan amperage shall be equipped with “system interlocks”, which shall automatically shutdown the affected paint operations if duct pressure or fan amperage is outside the normal range established in the 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 [326 IAC 8-2-2]

(a) To document compliance with Condition D.3.1(b), 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 Conditions D.3.1(b). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the Primer/Surfacer Coating line (PA-05).

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) A log of the dates of use.

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

(4) The calculated daily volume weighted average emission in pounds per gallon coating solids as applied from the Primer/Surfacer Coating line (PA-05).

(b) To document compliance with Condition D.3.1(c), the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limit established in Conditions D.3.1(c). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used monthly.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) The calculated monthly volume weighted average emission in pounds per gallon coating as applied from the Sealer/Deadener Coating line (PA-03).

(c) To document compliance with Condition D.3.2, 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.3.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the Primer/Surfacer Coating line (PA-05) and the E-Coat tank in SECTION D.2.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) A log of the dates of use.

(3) The water content of each coating material used (as applied).

(4) The calculated daily volume weighted average VOC content per gallon of the coatings less water as applied from the Primer/Surfacer Coating line (PA-05) and the E-Coat Line (PA-02) in SECTION D.2.

(d) To document compliance with Condition D.3.9, the Permittee shall maintain a log of weekly overspray observations, weekly observations of the water/oil level in the pans, and monthly inspections.

(e) To document compliance with Condition D.3.10, the Permittee shall maintain records of the continuous temperature records (on a three-hour average basis) for the Primer/Surfacer Coating line ID PA-05 regenerative thermal oxidizer (RTO#1 with stack ID 1100) and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(f) To document compliance with Condition D.3.3, the Permittee shall maintain on file vendors guarantees and/or certifications for the dry filters efficiency.

(g) All records shall be maintained and available upon a request for inspection by the IDEM, OAQ and shall be in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.13 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.3.1 shall be submitted quarterly to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(A) Two (2) basecoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash systems and dry filters to control particulate overspray, exhausting to stack ID 1032 and stack ID 1043.

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of 2.6 MMBtu/hr, exhausting to stack ID 1033 and stack ID 1044.

(C) Two (2) clearcoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems. The automatic zones use water/oil emulsion wash systems to control particulate overspray and the manual zones use dry filters. The manual zones are cascaded to the automatic zones, and the automatic zones are controlled by one (1) RTO, identified as RTO #2 with stack ID 1101.

(D) One (1) natural gas-fired Topcoat 5-stage oven tunnel, which consists of five (5) zones, oven zone #1 with a heat input capacity of 3.5 MMBtu/hr, oven zone #2 with a heat input capacity of 2.6 MMBtu/hr and oven zones #3, #4, and #5, each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(E) One (1) cooling tunnel, exhausting to stack ID 1041.

(F) One (1) oven exit hood exhaust, exhausting to stack ID 1037.

(G) Topcoat on-line repair, identified as PA-07, which includes:
(i) One (1) repair sanding booth, identified as PA-08, controlled by dust filters, exhausting to stack ID 1056.
(ii) One (1) repair coating booth using water wash system to control particulate overspray, exhausting to stack ID 1057.
(iii) One(1) natural gas-fired repair oven, with a maximum heat input capacity of 2.6 MMBtu/hr, exhausting to stack ID 1058.
(iv) One (1) cooling tunnel, exhausting to stack ID 1060.
(v) One (1) small repair booth, exhausting to stack ID 1055, with infrared curing, consists of three (3) banks and portable infrared lights.

(5) Blackout/Cavity wax coating booth, identified as PA-11, equipped with dry filters, exhausting to stack ID 1062.

(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 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the Topcoat Coating operation, Topcoat on-line repair, both identified as PA-07, and Topcoat in-line repair, identified as PA-09 shall be as follows:

(a) The capture systems for the clearcoat booths of the Topcoat Lines #1 and #2 shall be vented into one (1) RTO, identified as RTO#2 with stack ID 1101. The RTO shall achieve a minimum destruction efficiency of ninety-five percent (95%).

(b) The Topcoat drying oven shall be vented into one (1) RTO, identified as RTO #1 with stack ID 1100. The RTO shall achieve a minimum destruction efficiency of ninety-five percent (95%).

(c) The VOC emissions, from the Topcoat Coating Operation Line #1 and Line #2 (including controlled and uncontrolled emissions), combined with the uncontrolled Topcoat on-line repair, both identified as PA-07 shall not exceed 5.2 pounds per gallon of applied coating solids (lb/gacs), based on a daily volume weighted average.

(d) The daily volume weighted average of the VOC content of the Blackout (PA-11) coating used, shall not exceed 0.74 pound per gallon of coating (lbs/gal) as applied.

(e) The monthly volume weighted average of the VOC content of the Cavity Wax used, shall not exceed 1.2 pound per gallon of coating (lbs/gal).

(f) The PSD BACT requirements for the combustion facilities in SECTION D.4, are contained in SECTION D.10.

D.4.2 Volatile Organic Compounds [326 IAC 8-2-2]

Pursuant to 326 IAC 8-2-2, the VOC delivered to the applicators from the Topcoat Coating operation and Topcoat on-line repair, both identified as PA-07, including flash-off areas, and drying oven shall not exceed 0.34 kilogram per liter of coating (2.8 pounds per gallon), excluding water.

D.4.3 PSD BACT for PM and PM10 [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the PM and PM10 emissions from the water/oil emulsion wash and dry filters controlling the particulate emissions from the Topcoat Lines #1 and #2, two (2) basecoat spray booths, and two (2) clearcoat spray booths shall be limited to 0.0015 grains per standard cubic foot (gr/scf) of exhaust air and 99% control efficiency. The Department may revise this permit to adjust the PM and PM10 limitation of 0.0015 gr/scf based upon the results of the stack test required in Condition D.4.7. PM-10 includes filterable and condensible PM-10. Any revisions of the emissions limits made as the result of this provision shall be subject to the best available control technology (BACT) review and air quality analysis, specified in 326 IAC 2-2. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (revocation or Modification of a Permit: appeal to Board) shall apply to this permit condition.

(b) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (BACT), the PM and PM10 emissions from the dry filters controlling the Topcoat on-line repair sanding booth, identified as PA-08, shall be limited to 0.0015 gr/scf of exhaust air and 98.5% control efficiency. PM-10 includes filterable and condensible PM-10.

(c) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (BACT), the PM and PM10 emissions from the dry filters controlling the Blackout/Cavity wax booth, identified as PA-11, shall be limited to 0.0015 gr/scf of exhaust air and 98% collection /control efficiency. PM-10 includes filterable and condensible PM-10.

D.4.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.4.5 Regenerative Thermal Oxidizers (RTOs) [326 IAC 2-2] [326 IAC 8-2-2]

The exhausts from the clearcoat booths of the Topcoat Lines #1 and #2 shall be vented to regenerative thermal oxidizer (RTO#2 with stack ID 1101) at all times when one or both lines are in operation.

The exhausts from the Topcoat Drying Oven shall be vented to regenerative thermal oxidizer (RTO#1 with stack ID1100) at all times when the oven is in operation.

D.4.6 Volatile Organic Compounds [326 IAC 8-2-2] [326 IAC 8-1-2]

Pursuant to 326 IAC 8-1-2(a), the VOC emission limitations under 326 IAC 8-2-2 in Condition D.4.2, for the topcoat Coating operation ID PA-07, shall be achieved through one (1) or any combination of the following: thermal incineration, use of higher solids (low solvent) coatings, and/or waterborne coatings.

D.4.7 Testing Requirements [326 IAC 2-2] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the Topcoat Coating Operation (PA-07), the E-Coat Coating Line (PA-02) in SECTION D.2, the Primer/Surfacer Coating Line (PA-05) in SECTION D.3, and the Sealer Deadener (PA-03) in SECTION D.3, the Permittee shall conduct initial performance tests of the Topcoat Coating Operation (PA-07) (one drying oven), the E-Coat Coating Line (PA-02) (E-Coat tank, rinse stages, and drying oven) in SECTION D.2 ,and the Primer/Surfacer Coating Line (PA-05) (drying oven) in SECTION D.3 to determine compliance with the limits on VOC emissions, capture efficiency, and destruction efficiency of the regenerative thermal oxidizer (RTO#1 with stack ID 1100), and applicators transfer efficiencies, utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

(b) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the Topcoat Coating operation, identified as PA-07, the Permittee shall conduct initial performance tests of the new Topcoat Coating operation ID PA-07 (two clearcoat booths), to determine compliance with the limits on VOC emissions and destruction efficiency of the regenerative thermal oxidizer (RTO#2 with stack ID 1101), and applicators transfer efficiencies, utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

(c) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of Topcoat Coating Line (PA-07), in order to demonstrate compliance with Condition D.4.3, the Permittee shall conduct initial performance tests to measure the PM/PM10 emission rates in grains per standard cubic feet of exhaust air of the water/oil emulsion wash and dry filters controlling the basecoat booths and clearcoat booths of the Topcoat Coating Line (PA-07), utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.4.8 Volatile Organic Compounds (VOC) [326 IAC 2-2] [326 IAC 8-2-2]

(a) Compliance with the VOC content and usage limitations contained in Conditions D.4.1 and D.4.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) Compliance with the PSD BACT limit in D.4.1(c) shall be determined using daily volume weighted average of the coating solids consumed and actual transfer efficiencies and shall be determined using the following equation:

$$DWA = \frac{\sum_{i=1}^{n} (C_i)(U_i) \times (1-(CE \times DRE))}{\sum_{i=1}^{n} (S_i \times TE)}$$

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
n = no. of coatings used during the day
CE = capture efficiency of the emission system vented to the RTO
DRE =destruction or removal efficiency of the RTO

(c) Compliance with the PSD BACT limits in D.4.1(d) and D.4.1(e) from the Blackout and Cavity Wax application shall be determined using the following equation:

$$DWA = \frac{\sum_{i=1}^{n} (C_i)(U_i)}{\sum_{i=1}^{n} U_i}$$

where:
DWA = monthly calculated volume weighted average emissions in pounds per gallon coating applied.
C = VOC content of coating $_i$, lb VOC/gal
U = actual coating $_i$ usage, gal/month
n = no. of coatings used during the month

(d) Compliance with the VOC limitation in Condition D.4.2 shall be determined using a daily volume weighted average of the coatings applied less water using the following equation:

$$A = \frac{\sum_{i=1}^{n} (C_i)(U_i) \times (1-(CE \times DRE))}{\sum_{i=1}^{n} (U_i \times (1-D_i))}$$

where:
A = daily volume weighted average, lb VOC/gal less water
C = VOC content of coating $_i$, lb VOC/gal
U = actual coating $_i$ usage, gal/day
D = coating$_i$ volume % water
n = no. of coatings used during the day
CE = capture efficiency of the emission system vented to the RTO
DRE =destruction or removal efficiency of the RTO

D.4.9 Regenerative Thermal Oxidizers (RTOs) Temperature [326 IAC 2-2] [326 IAC 8-2-2]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the Topcoat Coating operation ID PA-07 regenerative thermal oxidizers (RTO#1 with stack ID 1100 and RTO#2 with stack ID 1101) for measuring operating temperature. For the purposes of the condition, continuous shall mean no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the three (3) hour rolling average operating temperature of the thermal oxidizer shall be maintained at a minimum temperature of 1400^{o}F.

(b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in conditions D.4.1 and D.4.2, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the three (3) hour rolling average temperature as observed during the compliant stack test.

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

D.4.10 Water/Oil Emulsion Wash and Dry Filters Monitoring

(a) For Topcoat Coating operation, identified as PA-07 –
Daily inspection shall be performed prior to the paint booth's operation to verify the proper placement and configuration of the baffle panels of the water/oil emulsion wash system and dry filters. Daily inspections shall be performed during the paint booth's operation to verify the proper flow of water/oil through the water/oil pan of the water/oil emulsion wash system that affect water/oil pan capture efficiency (e.g., debris in the water/oil pans). To monitor the performance of the water/oil emulsion wash and dry filters, weekly observations shall be made of the overspray from the Topcoat Coating operation, identified as PA-07, stacks (ID 1032, ID 1100, ID 1101) while one or more of the booths are in operation.

For Blackout/Cavity wax booth, identified as PA-11-
Daily inspections shall be performed during the paint booth's operation to verify the proper placement of the dry filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the Blackout/Cavity wax booth, identified as PA-11, stack (ID 1062), while it is operating.

If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.4.11 Parametric Monitoring [326 IAC 8-2-2]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in condition D.4.1 and D.4.2, as approved by IDEM.

(b) The equipment to measure duct pressure or fan amperage shall be equipped with “system interlocks”, which shall automatically shutdown the affected paint operations if duct pressure or fan amperage is outside the normal range established in most recent compliant stack test.

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

D.4.12 Record Keeping Requirements [326 IAC 8-2-2]

(a) To document compliance with Condition D.4.1(c) and (d), 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.4.1(c) and (d). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the Topcoat Coating operation and Topcoat on-line repair, both identified as PA-07 and Blackout, identified as PA-11.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) A log of the dates of use.

(3) The solids content of each coating material used (as applied) for the Topcoat Coating operation and Topcoat on-line repair, both identified as PA-07

(4) The calculated daily volume weighted average emission in pounds per gallon coating solids as applied from the Topcoat Coating operation and the Topcoat on-line repair, both identified as PA-07 and the calculated

daily volume weighted average emission in pounds per gallon of coating as applied from the Blackout operation, identified as PA-11.

(b) To document compliance with Condition D.4.1(e), the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.4.1(e). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used monthly.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) The calculated monthly volume weighted average emission in pounds per gallon coating as applied from each of the Black out and Cavity Wax.

(c) To document compliance with Condition D.4.2, 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.4.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the Topcoat Coating operation and Topcoat on-line repair, both identified as PA-07.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) A log of the dates of use.

(3) The water content of each coating material used (as applied).

(4) The calculated daily volume weighted average VOC content per gallon of the coatings less water as applied from the Topcoat Coating operation and the Topcoat on-line repair, both identified as PA-07.

(d) To document compliance with Condition D.4.9, the Permittee shall maintain a log of the weekly overspray observations, weekly observations of the water/oil level in the pans, and the daily and monthly inspections.

(e) To document compliance with Condition D.4.10, the Permittee shall maintain records of the continuous temperature records (on a three-hour average basis) for the Topcoat Coating operation, identified as PA-07 regenerative thermal oxidizers

(RTO#1 with stack ID 1100 and RTO#2 with stack ID 1101) and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(f) To document compliance with Condition D.4.3, the Permittee shall maintain on file vendors guarantees and/or certifications for the dry filters efficiency.

(g) All records shall be maintained and available upon a request for inspection by the IDEM, OAQ and shall be in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.13 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.4.1 shall be submitted quarterly to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(b) Plastics Operations:

(1) Plastic Parts Coating Line, identified as PO-02, with a capacity of 120 hangers per hour, consisting of the following:

(A) Alkaline pretreatment process, identified as PO-01.

(B) One (1) dry-off tunnel, exhausting to stack ID 2000.

(C) One (1) primer spray booth, utilizing High Volume Low Pressure (HVLP) and/or electrostatic application systems, using water/oil emulsion wash system to control particulate overspray, exhausting to stack ID 2002.

(D) One (1) basecoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray. If waterborne basecoat is utilized, the basecoat spray booth will exhaust to stacks with ID 2003 and ID 2004. If solventborne basecoat is utilized, the basecoat spray booth will be controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

(E) One clearcoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray, and VOC emissions controlled by one (1) RTO, with a maximum heat input capacity of 14.00 MMBtu/hr, identified as RTO #3 with stack ID 2029.

(F) One (1) clearcoat flashoff area.

(G) One (1) plastic parts oven tunnel which consists of two zones with one (1) 2.6 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

(H) One (1) natural gas-fired air makeup unit, equipped with a two-stage burner, with a combined maximum heat input capacity of 19.0 MMBtu/hr.

(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] [326 IAC 8-1-6]

Pursuant to 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the Plastic Parts Coating Line, identified as PO-02, and the plastic parts injection molding machines, identified as PO-06, PO-07, and PO-08, shall be as follows:

(a) The VOC emissions, from the primer coating process shall not exceed 0.90 pound per gallon of coating (lbs/gal) applied, based on a daily volume weighted average.

(b) The VOC emissions from the basecoat coating booth after control when using solvent-borne basecoat, shall not exceed 1.15 lbs/gal of coating applied, based on a daily volume weighted average.

(c) The VOC emissions after control from the clearcoat coating booth, shall not exceed 3.25 lbs/gal of coating applied, based on a daily volume weighted average.

(d) The capture system from the clearcoat booth of the Plastic Parts Coating Line shall be vented into RTO#3 with stack ID 2029. The RTO#3 shall achieve a minimum destruction efficiency of ninety-five percent (95%).

(e) The daily volume weighted average of the VOC content of the coatings applied to the Intrument Panel, shall not exceed 2.3 lbs/gallon less water of coating applied.

(f) Good work practices which includes the following:

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

(2) 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.

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

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

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

(g) The PSD BACT for the plastic parts production shall be the use of injection molding in the process to minimize VOC emissions.

(h) The PSD BACT requirements for the combustion facilities in SECTION D.5, are contained in SECTION D.10.

Compliance with (a) through (f) of this condition shall satisfy the requirements of 326 IAC 8-1-6.

D.5.2 PSD BACT for PM and PM10 [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the PM and PM10 emissions from the water/oil emulsion wash controlling the particulate emissions from the Plastic Parts Coating Line ID PO-02, shall be limited to 0.0015 grains per standard cubic foot (gr/scf) of exhaust air and 99% control efficiency. The Department may revise this permit to adjust the PM and PM10 limitation of 0.0015 gr/scf based upon the results of the stack test required in Condition D.5.5. PM-10 includes filterable and condensible PM-10. Any revisions of the emissions limits made as the result of this provision shall be subject to the best available control technology (BACT) review and air quality analysis, specified in 326 IAC 2-2. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (revocation or Modification of a Permit: appeal to Board) shall apply to this permit condition.

D.5.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.5.4 Regenerative Thermal Oxidizer (RTO) [326 IAC 2-2]

The basecoat booth (when using solvent-borne basecoat), the clearcoat booth and the oven exhausts from the Plastic Parts Coating Line ID PO-02 shall be vented to regenerative thermal oxidizer (RTO#3 with stack ID 2029) at all times when the line is in operation.

D.5.5 Testing Requirements [326 IAC 2-2] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the Plastic Parts Coating Line ID PO-02, the Permittee shall conduct initial performance tests of the new Plastic Parts Coating Line ID PO-02, to determine compliance with the limits on VOC emissions and destruction efficiency of the regenerative thermal oxidizer (RTO #3 with stack ID 2029), utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

(b) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of Plastic Parts Coating Line (PO-02), in order to demonstrate compliance with Condition D.5.2, the Permittee shall conduct initial performance tests to measure the PM/PM10 emission rates in grains per standard cubic feet of exhaust air of the water/oil emulsion wash controlling the primer booth, basecoat booth, and clearcoat booth of the Plastic Parts Coating Line (PO-02), utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10.

D.5.6 Volatile Organic Compounds (VOC) [326 IAC 2-2]

(a) Compliance with the VOC content and usage limitations contained in Condition D.5.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) Compliance with the PSD BACT VOC limits in Condition D.5.1(a) through (c) which apply after controls to emissions from the Plastic Parts Coating Line ID PO-02 shall be determined using the following equation:

$$DWA = \frac{\sum_{i=1}^{n} (C_i)(U_i) \times (1-(CE \times DRE))}{\sum_{i=1}^{n} U_i}$$

where:

DWA = daily calculated volume weighted average emissions in pounds per gallon coating applied.

C = VOC content of coating $_i$, lb VOC/gal

U = actual coating $_i$ usage, gal/day

n = no. of coatings used during the day

CE = capture efficiency of the emission system vented to the RTO

DRE =destruction/removal efficiency of the RTO

(c) Compliance with the PSD BACT VOC limit in Condition D.5.1(e) for coating instrument panels shall utilize the same equation in (b).

D.5.7 Regenerative Thermal Oxidizer (RTO) Temperature [326 IAC 2-2]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the Plastic Parts Coating Line ID PO-02, regenerative thermal oxidizer (RTO#3 with stack ID 2029) for measuring operating temperature. For the purposes of this condition, continuous shall mean no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the three (3) hour rolling average operating temperature of the thermal oxidizer shall be maintained at a minimum temperature of 1400^{o}F.

(b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.5.1 and D.5.2, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the three (3) hour rolling average temperature as observed during the compliant stack test.

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

D.5.8 Water/Oil Emulsion Wash and Dry Filters Monitoring

(a) For Plastic Parts Coating Line ID PO-02:
Daily inspection shall be performed prior to the Plastic Parts Coating line operation to verify the proper placement and configuration of the baffle panels of the water/oil emulsion wash system. Daily inspections shall be performed during the paint line’s operation to verify the placement, integrity and particle loading of the dry filters, and to verify the proper flow of water/oil through the water/oil pan of the water/oil emulsion wash system that affect water/oil pan capture efficiency (e.g., debris in the water/oil pans). To monitor the performance of the water/oil emulsion wash, weekly observations shall be made of the overspray from the Plastic Parts Coating Line ID PO-02 stacks (ID 2002, ID 2203, ID 2204, and ID 2005), while one or more of the booths are in operation.

If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.5.9 Parametric Monitoring [326 IAC 8-2-2]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limit in condition D.5.1, as approved by IDEM.

(b) The equipment to measure duct pressure or fan amperage shall be equipped with "system interlocks", which shall automatically shutdown the affected paint operations if duct pressure or fan amperage is outside the normal range established in the most recent compliant stack test.

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

D.5.10 Record Keeping Requirements [326 IAC 8-2-2]

(a) To document compliance with Condition D.5.1(a), (b), (c), and (e), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.5.1(a), (b), (c), and (e). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the Plastic Parts Coating Line, identified as PO-02.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) A log of the dates of use.

(3) The calculated daily volume weighted average emission in pounds per gallon of coating applied from the Plastic Parts Coating Line, identified as PO-02.

(b) To document compliance with Condition D.5.7, the Permittee shall maintain a log of the weekly overspray observations, weekly observations of the water/oil level in the pans, and the daily and monthly inspections.

(c) To document compliance with Condition D.5.8, the Permittee shall maintain records of the continuous temperature records (on a three-hour average basis) for the Plastic Parts Coating Line ID PO-02 regenerative thermal oxidizer (RTO#3 with stack ID 2029) and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(d) All records shall be maintained and available upon a request for inspection by the IDEM, OAQ and shall be in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.11 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.5.1 shall be submitted quarterly to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.6 FACILITY OPERATION CONDITIONS

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

(c) Final Assembly Operations:

(2) Gasoline dispensing operation, with a capacity of 70 units per hour, consisting of the following:

(A) Gasoline dispensing equipment, identified as AF-02, located at the assembly line, for filling new vehicles. Stage 2 vapor recovery control will be utilized, either through onboard Stage 2 vapor recovery or separate Stage 2 vapor recovery system.

(B) Two (2) gasoline storage tanks, identified as FAC-99 and FAC-100, located at the tank farm, each with a capacity of 19,800 gallons, each equipped with submerged fill and Stage 1 vapor balance.

(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 Prevention of Significant Deterioration (PSD) – Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2] [326 IAC 8-4-6]

Pursuant to 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the Gasoline Dispensing Facility, identified as AF-02, shall be as follows:

(a) The throughput of gasoline to the two (2) gasoline storage tanks, identified as FAC-99 and FAC-100, and the subsequent dispensing through AF-02, shall not exceed 2,250,000 gallons per twelve consecutive month period with compliance determined at the end of each month.

(b) The Permittee shall not allow the transfer of gasoline between any transport and any storage tank unless such tank is equipped with the following:

(1) A submerged fill pipe.

(2) Either a pressure relief valve set to release at no less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.

(3) A vapor balance system connected between the tank and the transport, operating according to manufacturer's specifications. The Stage I vapor recovery system shall be in operation at all times when the two (2) gasoline storage tanks (FAC-99 and FAC-100) are in operation, and the Stage II vapor recovery system shall be in operation at all times when the gasoline dispensing facility (AF-02) is filling new vehicle tanks.

(c) If the owner or employees of the owner of a gasoline dispensing facility are not present during loading, it shall be the responsibility of the owner or the operator of the transport to make certain the vapor balance system is connected between the transport and the storage tank and is operating according to manufacturer's specifications.

(d) All vapor collection and control systems shall be retested for vapor leakage and blockage, and successfully pass the test, at least every five (5) years or upon major system replacement or modification. A major system modification is considered to be replacing, repairing, or upgrading seventy-five percent (75%) or more of a vapor collection and control system of a facility.

Compliance with this condition shall satisfy the requirements of 326 IAC 8-4-6.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-4-9]

Pursuant to 326 IAC 8-4-9 (Leaks from transports and vapor collection systems, records) the source will operate a vapor control system. The requirements are as follows:

(a) No person shall allow a gasoline transport that is subject to this rule and that has a capacity of two thousand (2,000) gallons or more to be filled or emptied unless the gasoline transport completes the following:

(1) Annual leak detection testing before the end of the twelfth (12th) calendar month following the previous year's test, according to test procedures contained in 40 CFR 63.425 (e), as follows:

(A) Conduct the pressure and vacuum tests for the transport's cargo tank using a time period of five (5) minutes. The initial pressure for the pressure test shall be four hundred sixty (460) millimeters H_2O (eighteen (18) inches H_2O) gauge. The initial vacuum for the vacuum test shall be one hundred fifty (150) millimeters H_2O (six (6) inches H_2O) gauge. The maximum allowable pressure or vacuum change is twenty-five (25) millimeters H_2O (one (1) inch H_2O) in five (5) minutes.

(B) Conduct the pressure test of the cargo tank's internal vapor valve as follows:

(i) After completing the test under clause (A) of this condition, use the procedures in 40 CFR 60, Appendix A, Method 27 to repressurize the tank to four hundred sixty (460) millimeters H_2O (eighteen (18) inches H_2O) gauge. Close the transport's internal vapor valve or valves, thereby isolating the vapor return line and manifold from the tank.

(ii) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After five (5) minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable five (5) minute pressure increase is one hundred thirty (130) millimeters H_2O (five (5) inches H_2O).

(2) Repairs by the gasoline transport owner or operator, if the transport does not meet the criteria of subdivision (1) of this condition, and retesting to prove compliance with the criteria of subdivision (1) of this condition.

(b) The annual test data remain valid until the end of the twelfth (12th) calendar month following the test. The owner of the gasoline transport shall be responsible for compliance with subsection (a) of this condition, and shall provide the owner of the loading facility with the most recent valid modified 40 CFR 60, Appendix A, Method 27 test results upon request. The owner of the loading facility shall take all reasonable steps, including reviewing the test date and tester's signature, to ensure that gasoline transports loading at its facility comply with subsection (a) of this condition.

(c) The Permittee shall:

(1) Design and operate the applicable system and the gasoline loading equipment in a manner that prevents:

(A) Gauge pressure from exceeding four thousand five hundred (4,500) pascals (eighteen (18) inches of H2O) and a vacuum from exceeding one thousand five hundred (1,500) pascals (six (6) inches of H2O) in the gasoline transport;

(B) A reading equal to or greater than twenty-one thousand (21,000) parts per million as propane, from all points on the perimeter of a potential leak source when measured by the method referenced in 40 CFR 60, Appendix A, Method 21, or an equivalent procedure approved by the commissioner during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and

(C) Avoidable visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals.

(2) Within fifteen (15) days, repair and retest a vapor balance, collection, or control system that exceeds the limits in subdivision (1) of this condition.

(d) The department may, at any time, monitor a gasoline transport, vapor balance, or vapor control system to confirm continuing compliance with (a) of this condition.

(e) If the commissioner allows alternative test procedures, such method shall be submitted to the U.S. EPA as a SIP revision.

(f) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in subsection (c)(1)(B) of this condition. Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the two (2) gasoline storage tanks, identified as FAC-99 and FAC-100, and the one (1) gasoline dispensing unit, identified as AF-102. The threshold for leaks shall be ten thousand (10,000) parts per million methane.

D.6.3 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 the two (2) gasoline storage tanks (FAC-99 and FAC-100), and the one (1) gasoline dispensing unit (AF-02), and their control devices.

Compliance Determination Requirements

D.6.4 Volatile Organic Compounds [326 IAC 2-2]

In order to comply with Condition D.6.1, the Stage I and Stage II vapor recovery systems for VOC control shall be in operation at all times when gasoline is being transferred, or dispensed.

D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) To demonstrate compliance with Condition D.6.1, the Permittee shall perform testing required in Condition D.6.2.

(b) If the commissioner allows alternative test procedures in Condition D.6.2(c)(1)(B), such method shall be submitted to the U.S. EPA as a SIP revision.

(c) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in Condition D.6.2(c)(1)(B). Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the two (2) gasoline storage tanks (FAC-99 and FAC-100) and the one (1) gasoline dispensing unit (AF-02). The threshold for leaks shall be ten thousand (10,000) parts per million methane.

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

D.6.6 Vapor Recovery System Operation

For the Stage I and Stage II vapor recovery systems in order to document compliance with Condition D.6.1, the Permittee shall perform daily checks of the key operating parameters on days in which the filling of gasoline storage tanks is conducted, including venting for the Stage I and Stage II vapor recovery systems.

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

D.6.7 Record Keeping Requirements [326 IAC 2-7-5] [326 IAC 8-4-9]

(a) To document compliance with the sourcewide VOC limit in Condition D.6.1(a), the Permittee shall maintain records at the source that verify the throughput of gasoline received and dispensed.

(b) To document compliance with Condition D.6.2, the owner or operator of a vapor balance or vapor control system subject to this section shall maintain records of all certification testing. The records shall identify the following:

(1) The vapor balance, vapor collection, or vapor control system.
(2) The date of the test and, if applicable, retest.
(3) The results of the test and, if applicable, retest.

(c) To document compliance with Condition D.6.2, the owner or operator of a gasoline transport subject to this section shall keep a legible copy of the transport's most recent valid annual modified 40 CFR 60, Appendix A, Method 27 test either in the cab of the transport or affixed to the transport trailer. The test record shall identify the following:

(1) The gasoline transport.
(2) The type and date of the test and, if applicable, date of retest.
(3) The test methods, test data, and results certified as true, accurate, and in compliance with this rule by the person who performs the test.

This copy shall be made available immediately upon request to the department and to the owner of the loading facility for inspection and review. The department shall be allowed to make copies of the test results.

(d) To document compliance with Condition 6.2, the Permittee shall maintain records of the following:

(1) Certification testing required, if using an alternative testing procedure, as allowed under Condition D.6.2(e).
(2) Test required under Condition D.6.2(f).

(e) To document compliance with Condition D.6.6, the Permittee shall maintain records of the key operating parameters when the Stage I and Stage II vapor recovery systems are in use.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.8 State Only NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 Record Keeping Requirements [326 IAC 12] [40 CFR 60.116b Subpart Kb]

Pursuant to 40 CFR 60.116b (Monitoring of Operations), the Permittee shall keep readily accessible records showing the dimension of the two (2) gasoline storage tanks (FAC-99 and FAC-100) and an analysis showing the capacity of each storage vessel.

The records shall be kept for the life of the two (2) gasoline storage tanks (FAC-99 and FAC-100).

D.6.9 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.6.1(a) shall be submitted quarterly to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.7 FACILITY OPERATION CONDITIONS

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

(6) Miscellaneous cleaning and purge operation – paint operations, consisting of the following:

(A) Purge and clean-up solvent usage and recovery system, identified as PA-14, including virgin solvent distribution, day tanks, small portable containers including containers that meet the definition of cold cleaners, and spent solvent recovery.

(b) Plastics Operations:

(2) Miscellaneous cleaning and purge operation – plastics painting, consisting of the following:

(A) Purge and clean-up solvent usage and recovery system, identified as PO-05, including virgin solvent distribution, day tanks, portable containers, and spent solvent recovery.

(3) Three (3) plastic parts injection molding machines, identified as PO-06, PO-07, and PO-08, with a combined maximum throughput of 4,050 pounds per hour plastic pellets.

(c) Final Assembly Operations:

(1) Assembly window install and miscellaneous operations, identified as AF-01, with a capacity of 70 units per hour, consisting of all coatings, sealers, lubricants and related cleaning solvents used for auto assembly, including processes used to install window glass in vehicles, including body primer, glass cleaner, glass primer, and glass adhesive. Includes robotic and manual application equipment, coating delivery/circulation systems and raw material storage containers.

(d) Weld sealer process using manual and robotic weld sealer application equipment, material delivery systems and raw material storage, identified as WE-01.

(g) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, brazing equipment, cutting torches, soldering equipment, welding equipment:

(2) Body welding and finishing, identified as WE-02, using resistance welding and grinding , and MIG welding stations. The SR station "Stationary Robots" and backup MIG welding and grinding operations are controlled by cartridge filters.

Insignificant Activities

(z) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 26 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:

(5) Eight (8) cold cleaner degreasers, identified as ST-02,MS-02, WE-07, AF-05, VQ-01, PA-27, PO-20 and FAC-176, located at designated areas.

(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 326 IAC 2-2-3, the Best Available Control Technology for Volatile Organic Compounds (VOC) for the following emission units shall be as follows:

(a) The annual VOC usages of wiping/cleaning solvents and purge solvents from the Plastic operations, identified as PO-05, minus the amount of VOC in the purge material collected shall be limited to 39.12 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 is purged.

(b) The annual VOC usages of wiping/cleaning solvents and purge solvents from the Body Painting operations, identified as PA-14, minus the amount of VOC in the purge material collected shall be limited to 67.09 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 is purged.

(c) The monthly volume weighted average of the VOC content of the Weld Sealer (WE-01) coating used, shall not exceed 0.30 pound per gallon of coating (lbs/gal) as applied. The annual VOC emissions from this operation shall not exceed 3.91 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(d) The monthly volume weighted average of the VOC content of the coatings used in the Assembly Window Install and Miscellaneous operations, identified as AF-01, shall not exceed 0.40 pounds of VOC per gallon of coating, as applied (lb/gal of coating). The annual VOC emissions from this operation shall not exceed 24.78 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(e) The purge solvent capture systems from the body paint coating operations shall have a minimum purge solvent capture efficiency of 90%.

(f) The purge solvent capture systems from the plastic painting operation shall have a minimum purge solvent capture efficiency of 85%.

(g) Collected purge materials from the body paint coating lines and plastic painting lines shall be retained in closed containers until recycled on-site or shipped offsite for recycling or disposal.

(h) The total plant-wide VOC emissions from the miscellaneous operations in this SECTION D.7, which is the summation of the VOC emissions in (a) through (d) of this condition, shall not exceed 134.9 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(i) The PSD BACT requirements for the combustion facilities in SECTION D.7, are contained in SECTION D.10.

Compliance with this condition shall satisfy the requirements of 326 IAC 2-2.

D.7.2 Cleaning Work Practices [326 IAC 2-2]

The following work practices for cleaning and solvent purging operations shall be observed:

(a) Use of plastic and paper masking to cover certain equipment in booths and floors around the booths to reduce solvent usage;

(b) Capture of paint line cleaning solvent for off-site recycling or disposal to reduce VOC emissions;

(c) Use of low VOC or water-based solvents in certain processes, where applicable, (water-based grate masking, high pressure blasting);

(d) Use of metal shot blasting and alkaline painting stripping;

(e) Avoid spillage and splashing during handling of solvent, and if spillage, splashing, or leaks occur, they should be repaired or corrected immediately;

(f) Use covers or closed containers for both fresh and waste cleaning solvent;

(g) Avoid using absorbent or porous items, such as rags, bags, etc., for handling the solvent-wetted items; and

(h) Use closed containers to store or dispose of cloth, paper or other material impregnated with VOC.

In addition to these work practices, multi-feed paint lines directly to automatic applicators shall be installed, which reduces the amount of paint lines that need to be cleaned.

D.7.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements; and

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.7.4 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs constructed after July 1, 1990, shall ensure that the following requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^oC) (one hundred degrees Fahrenheit (100^oF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^oC) (one hundred twenty degrees Fahrenheit (120^oF)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.7.5 PSD BACT for PM and PM10 [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3, Best Available Control Technology (BACT), the PM and PM10 emissions from the cartridge filters controlling the body shop welding and finishing (WE-02) shall be limited to 0.0015 grains per standard cubic foot (gr/scf) of exhaust air and 99% control efficiency. PM-10 includes filterable and condensible PM-10.

D.7.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.7.7 Volatile Organic Compounds (VOC) [326 IAC 8-1-4(a)(3)] [326 IAC 8-1-2(a)] [326 IAC 2-2]

Compliance with the VOC content and usage limitations contained in Condition D.7.1(a), (b), (c), (d), and (h) shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.7.8 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(a)(7)]

(a) Compliance with the VOC limits for the solvent purging operation in Condition 7.1(a) and (b) shall be determined through the following:

(1) Purge solvent usage and collection shall be monitored separately for the Plastic operations and Body Painting operations. For each of the Plastic operations and Body Painting coating systems, the Permittee shall install flow meters to monitor the volume of purge solvent delivered to the spray applicators, and shall use collection and shipping records to monitor 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:

$$\text{Purge Solvent Collection/Capture Efficiency} = \frac{Sr * VOCr}{Pu * VOCv}$$

Where:
Sr = Purge material shipped for recovery (gallons)
Pu = Purge solvent usage (gallons)
VOCv = VOC content virgin purge (lb/gal)
VOCr = VOC content in purge materials shipped for recovery (lb/gal)

(b) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in Conditions D.7.1(c) and D.7.1(d), shall be determined by the following equation:

$$A = \frac{\sum_{i=1}^{n} (C_i)(U_i)}{\sum_{i=1}^{n} U_i}$$

where:
A = monthly calculated volume weighted average emissions in pounds per gallon coating applied.
C = VOC content of coating i, lb VOC/gal
U = actual coating i usage, gal/month
n = no. of coatings used during the day

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

There are no specific Compliance Monitoring Requirements applicable to these emission units.

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

D.7.9 Record Keeping Requirements

(a) To document compliance with Condition D.7.1(a) and (b), 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 usage limits and the VOC emission limits established in Condition D.7.1(a) and (b). Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

(1) The amount and VOC content of each wiping/cleaning solvent and each purge solvent used monthly from the purge and clean-up solvent and recovery systems for the Paint Operations (PA-14) and the Plastic Operations (PO-05).

(A) Records shall include, but not limited to, purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) The amount and percentage of purge material captured and recycled on a monthly basis.

(3) The calculated monthly VOC emissions from the wiping/cleaning and purge solvent usage from the purge and clean-up solvent and recovery systems for the Paint Operations (PA-14) and the Plastic Operations (PO-05).

(b) To document compliance with Condition D.7.1(c) and (d), the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established in Condition D.7.1(c) and (d). Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.

(1) The amount and VOC content of each coating, sealer, and adhesive material, and each solvent used monthly from the Weld Sealer (WE-01) and from the Assembly Window Install and Miscellaneous operations (AF-01).

(A) Records shall include, but not limited to, purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) The calculated monthly volume weighted average VOC emitted in pounds per gallon of the coatings used as applied, (sealers, adhesives, oils) for each month.

(c) To document compliance with Condition D.7.5, the Permittee shall maintain on file vendors guarantees and/or certifications for the cartridge filters efficiency.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.7.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.7.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Storage Tanks and Winshield Washer Fluid Fill

Insignificant Activities

(c) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

(A) Two (2) diesel fuel storage tanks for fire pumps, identified as FAC-93 and FAC-94, each with a capacity of 300 gallons, each equipped with submerged fill.
(B) Three (3) diesel fuel storage tanks for generators, identified as FAC-95, FAC-177 and FAC-178, each with a capacity of 150 gallons.

(z) Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 26 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) Windshield washer fluid fill operation, with a capacity of 70 units per hour, consisting of the following:

(A) Water/methanol fluid mixing and dispensing equipment, identified as AF-03, located at the assembly line, for filling new vehicles.
(B) One (1) windshield washer fluid storage tank, identified as FAC-102, located at the tank farm, with a capacity of 2,000 gallons, equipped with submerged fill.

(2) The following tanks, located at the Tank Farm:

(A) One (1) automatic transmission fluid storage tank, identified as FAC-96, with a capacity of 10,000 gallons, equipped with submerged fill. [326 IAC 12]
(B) One (1) antifreeze storage tank, identified as FAC-103, with a capacity of 10,000 gallons, equipped with submerged fill. [326 IAC 12]
(C) One (1) brake fluid storage tank, identified as FAC-98, with a capacity of 2,000 gallons, equipped with submerged fill.
(D) One (1) power steering fluid storage tank, identified as FAC-101, with a capacity of 2,000 gallons, equipped with submerged fill.
(E) One (1) manual transmission fluid storage tank, identified as FAC-104, with a capacity of 2,000 gallons, equipped with submerged fill.
(F) One (1) diesel fuel storage tank for yard truck operations, identified as MS-01, with a capacity of 3,000 gallons, equipped with submerged fill.

(3) The following tanks, located at the Utility Building:

(A) One (1) diesel fuel storage tank, identified as FAC-90, with a capacity of 2,000 gallons, equipped with submerged fill.

(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]

Pursuant to 326 IAC 2-2-3, VOC BACT for the facilities described in this section is the following:

(a) All diesel fuel and windshield washer storage tanks in this section shall be equipped with:

(1) a fixed roof, and

(2) a submerged fill pipe.

D.8.2 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.

SECTION D.9 FACILITY OPERATION CONDITIONS

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

Insignificant Activities

(a) Painting Operations:

(3) Topcoat in-line repair, which includes repair area for small interior topcoat, imperfections, manual application equipment, identified as PA-09.

(7) Final Repair, identified as PA-12, which includes repair coating booths and general areas, using manual application systems, and IR curing equipment.

(8) Final Repair – Air Dry, identified as PA-13, using air dry materials and manual application system.

(10) Plastic Parts Touch-up Booth, identified as PO-17, using dry filters for particulates control and manual application systems.

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

(a) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), and 326 IAC 8-2-2, the VOC content of the coatings used in the Final Repair, identified as PA-12, shall not exceed a daily volume weighted average of 4.8 pounds per gallon of coatings less water as applied.

(b) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the VOC usage from Final Repair-Air dry, identified as PA-13, shall be less than 15 pounds per day. Compliance with this limit shall make 326 IAC 8-2-2, not applicable.

(c) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the VOC usage from Topcoat in-line repair, identified as PA-09, shall be less than 15 pounds per day. Compliance with this limit shall make 326 IAC 8-2-2, not applicable.

(d) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the VOC usage from Plastic Parts Touch-up booth, identified as PO-17, shall be less than 10.0 pounds per day.

D.9.2 PSD BACT for PM and PM10 [326 IAC 2-2]

Pursuant to 326 IAC 2-2, Best Available Control Technology (BACT), the PM and PM10 emissions from the dry filters controlling the Final Repair, identified as PA-12 and Plastic Parts Touch-up Booth, identified as PO-17, shall be limited to 0.0015 grains per standard cubic foot (gr/scf) of exhaust air and 98% control efficiency. PM-10 includes filterable and condensible PM-10.

D.9.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.9.4 Volatile Organic Compounds (VOC) [326 IAC 2-2]

(a) Compliance with the VOC content and usage limitations contained in Condition D.9.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) Compliance with the PSD BACT VOC limits in Condition D.9.1(a) shall be determined using the following equation:

$$DWA = \frac{\sum_{i=1}^{n} (C_i)(U_i)}{\sum_{i=1}^{n} U_i}$$

where:
DWA = daily calculated volume weighted average emissions in pounds per gallon coating applied.
C = VOC content of coating $_i$, lb VOC/gal
U = actual coating $_i$ usage, gal/day
n = no. of coatings used during the day

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

D.9.5 Dry Filters Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the Final Repair, identified as PA-12 stack (ID 1063) and Plastic Parts Touch-up Booth, identified as PO-17 stack (ID 2010) while the repair is in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.9.6 Record Keeping Requirements [326 IAC 8-2-2]

(a) To document compliance with Condition D.9.1, 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.9.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the Topcoat in-line repair, identified as PA-09, Final Repair, identified as PA-12, and Final Repair-Air Dry, identified as PA-13.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) A log of the dates of use.

(3) The calculated daily volume weighted average VOC emission in pounds per gallon as applied from Final Repair, identified as PA-12.

(4) The calculated daily VOC emissions from Topcoat in-line repair, identified as PA-09, Final Repair-Air Dry, identified as PA-13, and Plastic Parts Touch-up Booth, identified as PO-17.

(b) To document compliance with Condition D.9.5, the Permittee shall maintain a log of the weekly overspray observations, and the daily and monthly inspections.

(c) To document compliance with Condition D.9.2, the Permittee shall maintain on file vendors guarantees and/or certifications for the dry filters efficiency.

(d) All records shall be maintained and available upon a request for inspection by the IDEM, OAQ and shall be in accordance with Section C - General Record Keeping Requirements, of this permit.

D.9.7 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.9.1 shall be submitted quarterly to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.10 FACILITY OPERATION CONDITIONS – Various Combustion Units

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

(a) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

(B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID 1100.
(C) One (1) E-Coat pre-heat zone, with with a maximum heat input capacity of 3.7 MMBtu/hr, exhausting to stack ID 1003.
(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of five oven zones, each with a heat input capacity of 3.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, one with a maximum heat input capacity of 3.5 MMBtu/hr and one with a maximum heat input capacity of 2.6 MMBtu/hr.
(C) One (1) natural gas-fired Primer/Surfacer 5-stage oven tunnel, which consists of five (5) zones, oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.
(D) One (1) oven exit hood exhaust, exhausting to stack ID 1021.

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of 2.6 MMBtu/hr, exhausting to stack ID 1033 and stack ID 1044.

(D) One (1) natural gas-fired Topcoat 5-stage oven tunnel, which consists of five (5) zones, oven zone #1 with a heat input capacity of 3.5 MMBtu/hr, oven zone #2 with a heat input capacity of 2.6 MMBtu/hr and oven zones #3, #4, and #5, each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(F) One (1) oven exit hood exhaust, exhausting to stack ID 1037.

(G) Topcoat on-line repair, identified as PA-07, which includes:

(iii) One(1) natural gas-fired repair oven, with a maximum heat input capacity of 2.6 MMBtu/hr, exhausting to stack ID 1058.

(i) Air makeup units as follows:

(i) Two (2) natural gas-fired air makeup units, for the Topcoat Lines #1 and #2 basecoat booths, each equipped with a two-stage burner, each with a combined maximum heat input capacity of 9.2 MMBtu/hr.
(ii) Two (2) natural gas-fired air makeup units, for Topcoat Lines #1 and #2 clearcoat booths, each equipped with a two-stage burner, each with a combined maximum heat input capacity of 5.8 MMBtu/hr.
(iii) One (1) natural gas-fired air makeup unit, for the topcoat in-line repair operations, equipped with a two-stage burner, with a combined maximum heat input capacity of 12.2 MMBtu/hr.

(8) One (1) natural gas-fired air makeup unit, with a maximum heat input capacity of 20.0 MMBtu/hr.

(9) One (1) natural gas-fired air makeup unit, with a maximum heat input capacity of 8.0 MMBtu/hr, identified as PA-22.

(10) One (1) natural gas fired air makeup unit, with a maximum heat input capacity of 5.0 MMBtu/hr, identified as PA-23.

(11) Two (2) natural gas-fired HVAC units, identified as PA-24 and PA-25, each with a maximum heat input capacity of 13.0 MMBtu/hr.

(12) One (1) natural gas-fired HVAC unit, with a maximum heat input capacity of 8.0 MMBtu/hr, identified as PA-26.

(b) Plastics Operations:

(1) Plastic Parts Coating Line, identified as PO-02, with a capacity of 120 hangers per hour, consisting of the following:

(E) One clearcoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water wash or oil emulsion system to control particulate overspray, and VOC emissions controlled by one (1) RTO, with a maximum heat input capacity of 14.0 MMBtu/hr, identified as RTO #3 with stack ID 2029.
(G) One (1) plastic parts oven tunnel which consists of two (2) zones with one (1) 2.6 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.
(H) One (1) natural gas-fired air makeup unit, equipped with a two-stage burner, with a combined maximum heat input capacity of 19.0 MMBtu/hr.

(e) Two (2) diesel fired emergency generators, identified as FAC-84 and FAC-85, each with a rated capacity of 500 kilowatts (kw).

(f) One diesel fired back-up generator, identified as FAC-86, with a rated capacity equal to or less than 100 kilowatts (kw).

Insignificant Activities

(b) 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) One (1) natural gas-fired hot water heater (FAC-110) for the purpose of supplying hot water to the café kitchen, with a combined maximum heat input capacity of 0.50 MMBtu/h

(2) Four (4) natural gas-fired hot water generators, associated with PA-20, located in the body painting area, with a combined maximum heat input capacity of 24.5 MMBtu/hr.

(3) One (1) natural gas-fired air makeup unit for the Primer/Surfacer sanding and inspection booth (PA-06), with a maximum heat input capacity of 6.4 MMBtu/hr.

(4) Twenty-eight (28) natural gas-fired space heaters (FAC-53 through FAC-80) with a combined maximum heat input capacity of 3.4 MMBtu/hr.

(5) Natural gas-fired HVAC units (FAC-01 through FAC-07, FAC-11 through FAC-20, FAC-26 through FAC-30, FAC-32, FAC-35 through FAC-37, FAC-39 through FAC-41, FAC-43 through FAC-52, FAC-146, FAC-147 and FAC-170), with a combined maximum heat input capacity of 87.5 MMBtu/hr.

(6) Forty three (43) natural gas-fired space heaters (FAC-117 through FAC-130, FAC-133 through FAC-139, FAC-148 through FAC-150 and FAC -151 through FAC-169), with a combined maximum heat input capacity of 6.9 MMBtu/hr.

(7) Four (4) natural gas-fired HVAC units (FAC-116, FAC-131, FAC-132 and FAC-140), with a combined maximum heat input capacity of 2.2 MMBtu/hr.

(s) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower.

(1) One (1) substation emergency generator, identified as FAC-81, with a capacity of 81 kilowatts (kw).

(2) One (1) Consolidation Center emergency generator, identified as FAC-89, with a capacity rating of 81 kilowatts (kw).

(3) One (1) Credit Union building emergency generator, identified as FAC-115, with a capacity of 81 kilowatts (kw).

(t) Other emergency equipment as follows: Stationary fire pumps.

(1) Two (2) stationary fire pumps, identified as FAC-82 and FAC-83, each with a rated capacity of 183 horsepower.

(u) Emergency generators as follows: Gasoline generators not exceeding 110 horsepower.

(1) Two (2) emergency generators, identified as FAC-145 and FAC-175, each with a capacity of 3.0 kilowatts (kw).

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

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

D.10.1 Prevention of Significant Deterioration (PSD) CO Minor Limit [326 IAC 2-2]

The CO emissions from all natural gas combustion units in this SECTION D.10 shall not exceed 188.5 pounds per million cubic feet (lb/MMCF), and the total natural gas fuel usage shall be limited to 1,030 million cubic feet (1,000,000 decatherms) per 12 consecutive month period with compliance determined at the end of each month. Compliance with this limit in conjunction with the PTE of eight (8) emergency generators, identified as FAC-81, FAC-84, FAC-85, FAC-86, FAC-89, FAC-115, FAC-145, FAC-175 and two (2) emergency fire pumps, identified as FAC-82 and FAC-83, limits the CO emissions to less than 100 tons per year, which renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable for CO emissions.

D.10.2 Prevention of Significant Deterioration (PSD) – Best Available Control Technology for Particulate Emissions (PM) and Nitrogen Oxides (NOx) [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the generators, identified as FAC-81 and FAC-84 through FAC-86, and the fire pumps, identified as FAC-82 and FAC-83, shall be as follows:

Emission Unit IDs	Emission Limitation		
	Operating Hours per year	NOx	PM
FAC-81 Substation Generator (81 kw), FAC-89 Consolidation Center Generator (81 kw), FAC-115 Credit Union Generator (81 kw)	500	3 g/hp-hr Use of Ultra Low Sulfur Diesel (ULSD)	0.22 g/hp-hr Use of ULSD
FAC-82, FAC-83: Fire Pumps (183 hp each)	500	7.8 g/hp-hr Use of ULSD	0.4 g/hp-hr Use of ULSD
FAC-84, FAC-85: Emergency Generators (500 kw, each)	500	4.5 g/hp-hr Use of ULSD	0.15 g/hp-hr Use of ULSD
FAC-86, 100 kw backup generator	500	3 g/hp-hr Use of ULSD	0.22 g/hp-hr Use of ULSD
FAC-145, 3 kw backup gasoline generator	500	9 g/hp-hr	
FAC-175, 3 kw backup gasoline generator	500	9 g/hp-hr	

Note: ULSD (Ultra Low Sulfur Diesel)

(b) Pursuant to 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the Natural Gas Combustion (small heaters < 15 MMBtu/hr maximum heat input capacity), shall be as follows:

Emission Unit IDs	Emission Limitation (lb/MMBTU)	
	NOx	PM
FAC-01 through FAC-07, FAC-11 through FAC-19, FAC-35, FAC-116, PA-05 air supply house, PA-06 air supply house, PA-07 air supply house, PA-21 through PA-26, PO-02 air supply house	0.08 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only
FAC-20, FAC-26, FAC-28, FAC-29, FAC-32, FAC-37, FAC-41, FAC-43 through FAC-52, FAC-140, FAC-146, FAC-147, PA-20	0.04 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only
FAC-27, FAC-30, PA-02 bake oven, PA-05 bake oven zones 3, 4 & 5, PA-07 repair oven, PO-02 bake oven zone 2, PA-07 zones 3, 4 & 5	0.02 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only

Emission Unit IDs	Emission Limitation (lb/MMBTU)	
	NOx	PM
PA-05 flash off heaters 1 and 2, PA - 05 bake oven zones 1 and 2, PA-07 basecoat flash off heaters 1 and 2, PA-07 topcoat bake oven zones 1 and 2, PO-02 bake oven zone 1	0.048 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only
FAC-36, FAC-39, FAC-40, FAC-53 through FAC-80, FAC-110, FAC-117 through FAC-139, FAC-148 through FAC-170, 3 regenerative thermal oxidizers	0.10 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only

(c) Pursuant to 326 IAC 2-2-3, low NOx burners shall be installed, maintained, and operated on the above combustion sources in (a) and (b) of this condition.

D.10.3 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the following facilities shall be limited to 0.28 pound per million British thermal units (lb/mmBtu):

- FAC-20, FAC-26 through FAC-30, FAC-32, FAC-35 through FAC-37, FAC-39 through FAC-41, FAC-50 through FAC-80, FAC-116 throgh FAC-144;
- PA-05, PA-07,and PO-02 (burners for heated flash areas and bake ovens);
- PA-20 (process water heaters) and the café water heater (FAC-110).

The limit shall be established using the following equation:

Pt = 1.09/(Q^0.26)

Where: 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)
Q = 175.14 mmBtu heat input

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

D.10.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the combustion sources in this SECTION D.10, the Permittee shall conduct performance tests to measure the NOx, utilizing methods as approved by the Commissioner for the following sources:

(a) One RTO
(b) One ASH rated at 19 MMBtu/hr; and
(c) one (1) of the following ASH units:
(1) Basecoat #1 or #2 ASH each, with 9.2 MMBtu/hr (PA-07)

The NOx testing for the RTOs shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration. Testing of the RTOs shall be conducted such that every seven and half (7.5) years each of the three (3) RTOs is tested.

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

D.10.5 Record Keeping Requirements

(a) To document compliance with Condition D.10.1, the Permittee shall maintain records of the total natural gas usage from all combustion units in this SECTION.

(b) To document compliance with Condition D.10.2, the Permittee shall maintain on file vendors guarantees and/or certifications for NOx emissions, excluding space heaters used for comfort, where guarantees and/or certifications are not readily available.

D.10.6 Reporting Requirements

Report of monthly natural gas usage shall be submitted to IDEM, OAQ on a quarterly basis to comply with Conditions D.10.1. This report shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.11 FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

(a) Painting Operations:

(1) E-Coat sanding and inspection booth, identified as PA-04, using dry filters for particulate control, exhausting to general ventilation.
(2) Primer/Surfacer sanding and inspection booth, identified as PA-06, using dry filters for particulate control, exhausting to general ventilation.

(k) Noncontact cooling tower systems with forced and/or induced draft cooling tower system not regulated under a NESHAP.

(1) One (1) forced draft chiller cooling tower, identified as FAC-105, with a capacity of 20,000 gallons per minute

(2) One (1) forced draft air compressor cooling tower, identified as FAC-107, with a capacity of 940 gallons per minute.

(o) Paved and unpaved roads and parking lots with public access.

(w) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(1) One (1) wheelabrator unit, identified as PA-15.

(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.11.1 PSD BACT for PM and PM10 [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the PM and PM10 emissions from each dry filters controlling the E-Coat sanding and inspection booth, identified as PA-04, and Primer/Surfacer sanding and inspection booth, identified as PA-06, shall each be limited to 0.0015 grains per standard cubic foot (gr/scf) of exhaust air and 98.5% control efficiency.

(b) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the PM and PM10 emissions from the cartridge filters controlling the wheelabrator/shotblasting unit, identified as PA-15, shall be limited to 0.0032 gr/scf of exhaust air and 0.0045 pounds per hour (lb/hr).

(c) The cooling towers shall be controlled by drift eliminators with 0.002% drift. The Permittee shall submit to IDEM, OAQ design specification of the cooling towers upon initial start up of the cooling towers.

(d) The Permittee shall minimize unpaved roads through ground cover in the form of grass, landscaping to prevent erosion and subsequent deposition of windborne particulate upon the roads. Use water to suppress fugitive dust from paved and unpaved roads when necessary.

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

D.11.2 Record Keeping Requirements

To document compliance with Condition D.11.1, the Permittee shall maintain on file vendors guarantees and/or certifications for the dry filters and cartridge filters efficiencies.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID 1100.

(C) One (1) E-Coat pre-heat zone, with a maximum heat input capacity of 3.7 MMBtu/hr, exhausting to stack ID 1003.

(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of five oven zones each with a heat input capacity of 3.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(E) One (1) cooling tunnel, exhausting to stack ID 1006.

Under 40 CFR 60, Subpart MM, this operation is considered a prime coat operation.

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(A) One (1) Primer/Surfacer spray coating booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system and dry filters to control particulate overspray, exhausting to stack ID 1014 and stack ID 1015.

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, one with a maximum heat input capacity of 3.5 MMBtu/hr and one with a maximum heat input capacity of 2.6 MMBtu/hr.

(C) One (1) natural gas-fired Primer/Surfacer 5-stage oven tunnel, which consists of five (5) zones, oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(Continued on next page)

(Continued from prior page)

(D) One oven exit hood exhaust, exhausting to stack ID 1021.

(E) One (1) cooling tunnel, exhausting to stack ID 1022.

Under 40 CFR 60, Subpart MM, this operation is considered a guide coat operation.

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(A) Two (2) basecoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system and dry filters to control particulate overspray, exhausting to stack ID 1032 and stack ID 1043.

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of 2.6 MMBtu/hr, exhausting to stack ID 1033 and stack ID 1044.

(C) Two (2) clearcoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems. The automatic zones use water/oil emulsion wash systems to control particulate overspray and the manual zones use dry filters. The manual zones are cascaded to the automatic zones, and the automatic zones are controlled by one (1) RTO, identified as RTO #2 with stack ID 1101.

(D) One (1) natural gas-fired Topcoat 5-stage oven tunnel, which consists of five (5) zones, oven zone #1, with a heat input of 3.5 MMBtu/hr, oven zone #2, with a heat input capacity of 2.6 MMBtu/hr and oven zones #3, #4 and #5, each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(E) One (1) cooling tunnel, exhausting to stack ID 1041.

(F) One (1) oven exit hood exhaust, exhausting to stack ID 1037.

Under 40 CFR 60, Subpart MM, this operation is considered a Topcoat operation.

(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 NSPS MM [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 60, Subpart MM.

E.1.2 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:

§ 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 (RT) 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:

Caj=concentration of VOC (as carbon) in the effluent gas flowing through stack (j) leaving the control device (parts per million by volume),

Cbi=concentration of VOC (as carbon) in the effluent gas flowing through stack (i) entering the control device (parts per million by volume),

Cfk=concentration of VOC (as carbon) in the effluent gas flowing through exhaust stack (k) not entering the control device (parts per million by volume),

Dci=density of each coating (i) as received (kilograms per liter),

Ddj=density of each type VOC dilution solvent (j) added to the coatings, as received (kilograms per liter),

Dr=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),

Lci=volume of each coating (i) consumed, as received (liters),

Lcil = Volume of each coating (i) consumed by each application method (l), as received (liters),

Ldj=volume of each type VOC dilution solvent (j) added to the coatings, as received (liters),

Lr=volume of VOC recovered from an affected facility (liters),

Ls=volume of solids in coatings consumed (liters),

LE=the total volume of the EDP system (liters),

Md=total mass of VOC in dilution solvent (kilograms),

M0=total mass of VOC in coatings as received (kilograms),

Mr=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

Qaj=volumetric flow rate of the effluent gas flowing through stack (j) leaving the control device (dry standard cubic meters per hour),

Qbi=volumetric flow rate of the effluent gas flowing through stack (i) entering the control device (dry standard cubic meters per hour),

Qfk=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,

Tl=transfer efficiency for application method (l),

Vsi=proportion of solids by volume in each coating (i) as received

$$\frac{liter\ solids}{liter\ coating}, and$$

Woi=proportion of VOC by weight in each coating (i), as received

$$\frac{kilograms\ VOC}{kilograms\ coating}$$

§ 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 RT is 0.16 or greater.

(ii) 0.17×350 (0.160–RT) kg of VOC per liter of applied coating solids when RT is greater than or equal to 0.040 and less than 0.160.

(iii) When RT 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.

§ 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:

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

[ΣLdjDdj 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 (RT) by the following equation:

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

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:

$$\sum_{i=1}^{n}$$

If the owner can justify to the Administrator's satisfaction that another method will give comparable results, the Administrator will approve its use on a case-by-case basis.

(1) In subsequent months, the owner or operator shall use the most recently determined capture fraction for the performance test.

(B) Determines the destruction efficiency of the control device using values of the volumetric flow rate of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation where "n" is the total number of stacks entering the control device and “m” is the total number of stacks leaving the control device:

$$E=\frac{\sum_{i=1}^{n} Q_{bi}\ C_{bi} - \sum_{j=1}^{m} Q_{aj}\ C_{aj}}{\sum_{i=1}^{n} Q_{bi}\ C_{bi}}$$

(1) In subsequent months, the owner or operator shall use the most recently determined VOC destruction efficiency for the performance test.

(C) If an emission control device controls the emissions from more than one affected facility, the owner or operator shall measure the VOC concentration (Cbi) in the effluent gas entering the control device (in parts per million by volume) and the volumetric flow rate (Qbi) 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 (Mo+Md) 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 (Ls) used in each calendar month for each affected facility as described under §60.393(c)(1)(i).

(iii) Calculate the mass of VOC recovered (Mr) each calendar month for each affected facility by the following equation: Mr=Lr Dr

(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:

$$N=\frac{M_o+M_d-M_r}{L_sT}$$

(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.

§ 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 required 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.

§ 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.

§ 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 Intentionally Omitted

E.1.3 One Time Deadline Relating to Automobile and Light-Duty Tucks NSPS [40 CFR Part 60, Subpart MM]

(a) 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.

(b) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

(c) The Permittee must conduct the initial performance test 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 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).

(d) 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.

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SECTION E.2 FACILITY OPERATION CONDITIONS

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

(e) Two (2) diesel fired emergency generators, identified as FAC-84 and FAC-85, each with a rated capacity of 500 kilowatts (kw). Under 40 CFR 60, Subpart IIII, these units are considered model year 2007 or later stationary internal combustion engines.

(f) One diesel fired back-up generator, identified as FAC-86, with a rated capacity equal to or less than 100 kilowatt (Kw). Under 40 CFR 60, Subpart IIII, this unit is considered a model year 2007 or later stationary internal combustion engine.

Insignificant Activites

(s) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower.

(1) Three (3) emergency generators, identified as FAC-81, FAC-89 and FAC-115, each with a capacity of 75 kilowatts (kw). Under 40 CFR 60, Subpart IIII, these units are considered model year 2007 or later emergency stationary internal combustion engines.

(t) Other emergency equipment as follows: Stationary fire pumps.

(1) Two (2) stationary fire pumps, identified as FAC-82 and FAC-83, each with a rated capacity of 183 horsepower. Under 40 CFR 60, Subpart IIII, these units are considered model year 2008 or earlier fire pump engines.

(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 IIII [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facilities described in this section except when otherwise specified in 40 CFR Part 60, Subpart IIII.

E.2.2 Stationary Compression Ignition Internal Combustion Engines NSPS Requirements [40 CFR Part 60, Subpart IIII]

Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee which shall comply with the provisions of 40 CFR Part 60, Subpart IIII, as follows:

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines,

(ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

(i) Manufactured after April 1, 2006 and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Intentionally omitted.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) Intentionally omitted.

(d) Intentionally omitted.

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Intentionally omitted.

(c) Intentionally omitted.

(d) Intentionally omitted.

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) Intentionally omitted.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Intentionally omitted.

(c) Intentionally omitted.

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

§ 60.4203 Intentionally omitted.

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Intentionally omitted.

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Intentionally omitted.

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Intentionally omitted.

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Intentionally omitted.

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(d) Intentionally omitted.

(e) Intentionally omitted.

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) Intentionally omitted.

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Compliance Requirements

§ 60.4210 Intentionally omitted.

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Intentionally omitted.

(3) Intentionally omitted.

(4) Intentionally omitted.

(5) Intentionally omitted.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

(d) Intentionally omitted.

(e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

Testing Requirements for Owners and Operators

§ 60.4212 Intentionally omitted.

§ 60.4213 Intentionally omitted.

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Intentionally omitted.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Special Requirements

§ 60.4215 Intentionally omitted.

§ 60.4216 Intentionally omitted.

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by the Administrator under §60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of paragraphs (a) and (b) of §60.4207, may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in §60.4202 or §60.4203 using such fuels.

(b) [Reserved]

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

§ 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

(1) The calendar year in which the engine was originally produced, or

(2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Tables to Subpart IIII of Part 60

Table 1 to Subpart IIII of Part 60 – Intentionally omitted.

Table 2 to Subpart IIII of Part 60 – Intentionally omitted.

Table 3 to Subpart IIII of Part 60._Certification Requirements for Stationary Fire Pump Engines

[As stated in § 60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:]

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d)
KW<75 (HP<100)	2011
75[le]KW<130 (100[le]HP<175)	2010
130[le]KW[le]560 (175[le]HP[le]750)	2009
KW>560 (HP>750)	2008

Table 4 to Subpart IIII of Part 60.- Emission Standards for Stationary Fire Pump Engines

[As stated in §§ 60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NOX	CO	PM
225[le]KW<450 (300[le]HP<600) ..	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ \3\	4.0 (3.0)	....	0.20 (0.15

\3\ In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60._Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19[le]KW<56 (25[le]HP<75)	2013
56[le]KW<130 (75[le]HP<175)	2012
KW>=130 (HP>=175)	2011

Table 8 to Subpart IIII of Part 60._Applicability of General Provisions to Subpart IIII

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions.	Yes.	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4219.
§ 60.3	Units and abbreviations	Yes.	
§ 60.4	Address.	Yes.	

Table 8 to Subpart IIII of Part 60._Applicability of General Provisions to Subpart IIII

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.5	Determination of construction or modification.	Yes.	
§ 60.6	Review of plans	Yes.	
§ 60.9	Availability of information.	Yes.	
§ 60.10	State Authority	Yes.	
§ 60.11	Compliance with standards and maintenance requirements.	No	Requirements are specified in subpart IIII.
§ 60.12	Circumvention..	Yes.	
§ 60.14	Modification	Yes.	
§ 60.15	Reconstruction...	Yes.	
§ 60.16	Priority list	Yes.	
§ 60.17	Incorporations by reference.	Yes.	
§ 60.18	General control device requirements.	No.	
§ 60.19	General notification and reporting requirements...	Yes.	

SECTION E.3 FACILITY OPERATION CONDITIONS

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

(b) Plastics Operations:

(1) Plastic Parts Coating Line, identified as PO-02, with a capacity of 120 hangers per hour, consisting of the following:

(A) Alkaline pretreatment process, identified as PO-01.
(B) One (1) dry-off tunnel, exhausting to stack ID 2000.
(C) One (1) primer spray booth, utilizing High Volume Low Pressure (HVLP) and/or electrostatic application systems, using water/oil emulsion wash system to control particulate overspray, exhausting to stack ID 2002.
(D) One (1) basecoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray. If waterborne basecoat is utilized, the basecoat spray booth will exhaust to stacks with ID 2003 and ID 2004. If solventborne basecoat is utilized, the basecoat spray booth will be controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.
(E) One clearcoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray, controlled by one (1) RTO, with a maximum heat input capacity of 14 MMBtu/hr, identified as RTO #3 with stack ID 2029.
(F) One (1) clearcoat flashoff area.
(G) One (1) plastic parts oven tunnel which consists of two zones with one (1) 2.6 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

Under 40 CFR 63, Subpart PPPP, this operation is considered a new general use coating operation.

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

E.3.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.3901, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the surface coating operations, as specified in Table 2 of 40 CFR 63, Subpart PPPP in accordance with schedule in 40 CFR 63 Subpart PPPP.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance 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

E.3.2 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 PPPP.

What This Subpart Covers

§ 63.4480 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for plastic parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.4481 Am I subject to this subpart?

(a) Plastic parts and products include, but are not limited to, plastic components of the following types of products as well as the products themselves: Motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products. Except as provided in paragraph (c) of this section, the source category to which this subpart applies is the surface coating of any plastic parts or products, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (5) of this section.

(1) Surface coating is the application of coating to a substrate using, for example, spray guns or dip tanks. When application of coating to a substrate occurs, then surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage. However, these activities do not comprise surface coating if they are not directly related to the application of the coating. Coating application with handheld, non-refillable aerosol containers, touch-up markers, marking pens, or the application of paper film or plastic film which may be pre-coated with an adhesive by the manufacturer are not coating operations for the purposes of this subpart.

(2) The general use coating subcategory includes all surface coating operations that are not automotive lamp coating operations, thermoplastic olefin (TPO) coating operations, or assembled on-road vehicle coating operations.

(3) The automotive lamp coating subcategory includes the surface coating of plastic components of the body of an exterior automotive lamp including, but not limited to, headlamps, tail lamps, turn signals, and marker (clearance) lamps; typical coatings used are reflective argent coatings and clear topcoats. This subcategory does not include the coating of interior automotive lamps, such as dome lamps and instrument panel lamps.

(4) The TPO coating subcategory includes the surface coating of TPO substrates; typical coatings used are adhesion promoters, color coatings, clear coatings and topcoats. The coating of TPO substrates on fully assembled on-road vehicles is not included in the TPO coating subcategory.

(5) The assembled on-road vehicle coating subcategory includes surface coating of fully assembled motor vehicles and trailers intended for on-road use, including, but not limited to: automobiles, light-duty trucks, heavy duty trucks, and busses

that have been repaired after a collision or otherwise repainted; fleet delivery trucks; and motor homes and other recreational vehicles (including camping trailers and fifth wheels). This subcategory also includes the incidental coating of parts, such as radiator grilles, that are removed from the fully assembled on-road vehicle to facilitate concurrent coating of all parts associated with the vehicle. The assembled on-road vehicle coating subcategory does not include the surface coating of plastic parts prior to their attachment to an on-road vehicle on an original equipment manufacturer's (OEM) assembly line. The assembled on-road vehicle coating subcategory also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles. Body fillers used to correct small surface defects and rubbing compounds used to remove surface scratches are not considered coatings subject to this subpart.

(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.4482, that uses 378 liters (100 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of plastic parts and products defined in paragraph (a) of this section; and 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. You do not need to include coatings that meet the definition of non-HAP coating contained in §63.4581 in determining whether you use 378 liters (100 gallons) per year, or more, of coatings in the surface coating of plastic parts and products.

(c) This subpart does not apply to surface coating or a coating operation that meets any of the criteria of paragraphs (c)(1) through (16) of this section.

(1) A coating operation conducted at a facility where the facility uses only coatings, thinners and other additives, and cleaning materials that contain no organic HAP, as determined according to §63.3941(a).

(2) Surface coating operations that occur at research or laboratory facilities, or is part of janitorial, building, and facility maintenance operations, or that occur at hobby shops that are operated for noncommercial purposes.

(3) Intentionally omitted.

(4) Intentionally omitted.

(5) Intentionally omitted.

(6) Intentionally omitted.

(7) Intentionally omitted.

(8) Intentionally omitted.

(9) Intentionally omitted.

(10) Intentionally omitted.

(11) Intentionally omitted.

(12) Intentionally omitted.

(13) Intentionally omitted.

(14) Intentionally omitted.

(15) Intentionally omitted.

(16) Surface coating of plastic components of automobiles and light-duty trucks that meet the applicability criteria in §63.3082(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) at a facility that meets the applicability criteria in §63.3081(b).

(d) If your facility meets the applicability criteria in §63.3081(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) and you perform surface coating of plastic parts or products that meets both the applicability criteria in §63.3082(c) and the applicability criteria of this subpart, then for the surface coating of any or all of your plastic parts or products that meets the applicability criteria in §63.3082(c), you may choose to comply with the requirements of subpart IIII of this part in lieu of complying with this subpart. Surface coating operations on plastic parts or products not intended for use in automobiles or light-duty trucks (for example, parts for motorcycles or lawn mowers) cannot be made part of your affected source under subpart IIII of this part.

(e) If you own or operate an affected source that meets the applicability criteria of this subpart and at the same facility you also perform surface coating that meets the applicability criteria of any other final surface coating NESHAP in this part, you may choose to comply as specified in paragraph (e)(1), (2), or (3) of this section.

(1) You may have each surface coating operation that meets the applicability criteria of a separate NESHAP comply with that NESHAP separately.

(2) You may comply with the emission limitation representing the predominant surface coating activity at your facility, as determined according to paragraphs (e)(2)(i) and (ii) of this section. However, you may not establish assembled on-road vehicle or automotive lamp coating operations as the predominant activity. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining the predominant surface coating activity at your facility.

(i) If a surface coating operation accounts for 90 percent or more of the surface coating activity at your facility (that is, the predominant activity), then compliance with the emission limitations of the predominant activity for all surface coating operations constitutes compliance with these and other applicable surface coating NESHAP. In determining predominant activity, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.

(ii) You must use kilogram (kg) (pound (lb)) of solids used as a measure of relative surface coating activity over a representative period of operation. You may estimate the relative mass of coating solids used from parameters other than coating consumption and mass solids content (*e.g.,* design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and mass solids content must be approved by the Administrator. You may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they represent the way the source will continue to operate in the future and are approved by the Administrator. You must determine the predominant activity at your facility and submit the results of that determination with the initial notification required by §63.4510(b). You must also determine predominant activity annually and include the determination in the next semi-annual compliance report required by §63.4520(a).

(3) You may comply with a facility-specific emission limit calculated from the relative amount of coating activity that is subject to each emission limit. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this subpart and other applicable surface coating NESHAP. The procedures for calculating the facility-specific emission limit are specified in §63.4490. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining a facility-specific emission limit for your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of total coating activities need not be included in the calculation of the facility-specific emission limit but must be included in the compliance calculations.

§ 63.4482 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, and existing affected source within each of the four subcategories listed in §63.4481(a).

(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 plastic parts and products within each subcategory.

(1) All coating operations as defined in §63.4581;

(2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;

(3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and

(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

(c) An affected source is a new source if it meets the criteria in paragraph (c)(1) of this section and the criteria in either paragraph (c)(2) or (3) of this section.

(1) You commenced the construction of the source after December 4, 2002 by installing new coating equipment.

(2) The new coating equipment is used to coat plastic parts and products at a source where no plastic parts surface coating was previously performed.

(3) The new coating equipment is used to perform plastic parts and products coating in a subcategory that was not previously performed.

(d) Intentionally omitted.

(e) Intentionally omitted.

§ 63.4483 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 demonstration described in §§63.4540, 63.4550, and 63.4560.

(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 April 19, 2004, the compliance date is April 19, 2004.

(2) If the initial startup of your new or reconstructed affected source occurs after April 19, 2004, the compliance date is the date of initial startup of your affected source.

(b) Intentionally omitted.

(c) Intentionally omitted.

(d) You must meet the notification requirements in §63.4510 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

§ 63.4490 What emission limits must I meet?

(a) For a new or reconstructed affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (a)(1) through (4) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.4541, §63.4551, or §63.4561.

(1) For each new general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(2) For each new automotive lamp coating affected source, limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(3) For each new TPO coating affected source, limit organic HAP emissions to no more than 0.22 kg (0.22 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(4) For each new assembled on-road vehicle coating affected source, limit organic HAP emissions to no more than 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(b) Intentionally omitted.

(c) If your facility's surface coating operations meet the applicability criteria of more than one of the subcategory emission limits specified in paragraphs (a) or (b) of this section, you may comply separately with each subcategory emission limit or comply using one of the alternatives in paragraph (c)(1) or (2) of this section.

(1) If the general use or TPO surface coating operations subject to only one of the emission limits specified in paragraphs (a)(1), (a)(3), (b)(1), or (b)(3) of this section account for 90 percent or more of the surface coating activity at your facility (*i.e.,* it is the predominant activity at your facility), then compliance with that emission limitation for all surface coating operations constitutes compliance with the other applicable emission limitations. You must use kg (lb) of solids used as a measure of relative surface coating activity over a representative period of operation. You may estimate the relative mass of coating solids used from parameters other than coating consumption and mass solids content (*e.g.,* design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and mass solids content must be approved by the Administrator. You may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they represent the way the source will continue to operate in the future and are approved by the Administrator. You must determine the predominant activity at your facility and submit the results of that determination with the initial notification required by §63.4510(b). Additionally, you must determine the facility's predominant activity annually and include the determination in the next semi-annual compliance report required by §63.4520(a).

(2) You may calculate and comply with a facility-specific emission limit as described in paragraphs (c)(2)(i) through (iii) of this section. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this and other applicable surface coating NESHAP. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of the other subcategories and constitute more than 1 percent of total coating activities. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.

(i) You are required to calculate the facility-specific emission limit for your facility when you submit the notification of compliance status required in §63.4510(c), and on a monthly basis afterward using the coating data for the relevant 12-month compliance period.

(ii) Use Equation 1 of this section to calculate the facility-specific emission limit for your surface coating operations for each 12-month compliance period.

$$\mathit{Facility-Specific}\ \text{Emission Limit} = \frac{\sum_{i=1}^{n} (\text{Limit}_i)(\mathit{Solids}_i)}{\sum_{i=1}^{n} (\mathit{Solids}_i)} \qquad (\mathit{Eq}.\ 1)$$

Where:
Facility-specific emission limit = Facility-specific emission limit for each 12-month compliance period, kg (lb) organic HAP per kg (lb) coating solids used.
Limit i = The new source or existing source emission limit applicable to coating operation, i, included in the facility-specific emission limit, converted to kg (lb) organic HAP per kg (lb) coating solids used, if the emission limit is not already in those units. All emission limits included in the facility-specific emission limit must be in the same units.
Solids i = The kg (lb) of solids used in coating operation, i, in the 12-month compliance period that is subject to emission limit, i. You may estimate the mass of coating solids used from parameters other than coating consumption and mass solids content (e.g., design specifications for the parts or products coated and the number of items produced). The use of parameters other than coating consumption and mass solids content must be approved by the Administrator.
n = The number of different coating operations included in the facility-specific emission limit.

(iii) If you need to convert an emission limit in another surface coating NESHAP from kg (lb) organic HAP per liter (gallon) coating solids used to kg (lb) organic HAP per kg (lb) coating solids used, you must use the default solids density of 1.50 kg solids per liter coating solids (12.5 lb solids per gal solids).

§ 63.4491 What are my options for meeting the emission limits?

You must include all coatings (as defined in §63.4581), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in §63.4490. To make this determination, you must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by §63.4530(c), and you must report it in the next semiannual compliance report required in §63.4520.

(a) Compliant material option. Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in §63.4490, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. You must meet all the requirements of §§63.4540, 63.4541, and 63.4542 to demonstrate compliance with the applicable emission limit using this option.

(b) Emission rate without add-on controls option. Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in §63.4490, calculated as a rolling 12-month emission rate and determined on a monthly basis. You must meet all the requirements of §§63.4550, 63.4551, and 63.4552 to demonstrate compliance with the emission limit using this option.

(c) *Emission rate* with *add-on controls option.* Demonstrate that, based on the coatings, thinners and/or other *additives*, and cleaning materials used in the coating operation(s), and the emissions reductions achieved by emission capture systems and add-on controls, the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in §63.4490, calculated as a rolling 12-month emission rate and determined on a monthly basis. If you use this compliance option, you must also demonstrate that all emission capture systems and add-on control devices for the coating operation(s) meet the operating limits required in §63.4492, except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.4561(j), and that you meet the work practice standards required in §63.4493. You must meet all the requirements of §§63.4560 through 63.4568 to demonstrate compliance with the emission limits, operating limits, and work practice standards using this option.

§ 63.4492 What operating limits must I meet?

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits.

(b) For any controlled coating operation(s) on which you use the emission rate with add-on controls option, except those for which you use a solvent recovery system and conduct a liquid-liquid material balance according to §63.4561(j), you must meet the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and 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 §63.4567. You must meet the operating limits at all times after you establish them.

(c) 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).

§ 63.4493 What work practice standards must I meet?

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any work practice standards.

(b) If you use the emission rate with add-on controls option, you must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s) for which you use this option; or you must meet an alternative standard as provided in paragraph (c) of this section. 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 and/or other additives, cleaning materials, and waste materials must be stored in closed containers.

(2) Spills of organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.

(3) Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.

(4) Mixing vessels 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) As provided in §63.6(g), we, the U.S. Environmental Protection Agency, may choose to grant you permission to use an alternative to the work practice standards in this section.

General Compliance Requirements

§ 63.4500 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(1) and (2) of this section.

(1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls option, as specified in §63.4491(a) and (b), must be in compliance with the applicable emission limit in §63.4490 at all times.

(2) Any coating operation(s) for which you use the emission rate with add-on controls option, as specified in §63.4491(c), must be in compliance with the emission limitations as specified in paragraphs (a)(2)(i) through (iii) of this section.

(i) The coating operation(s) must be in compliance with the applicable emission limit in §63.4490 at all times except during periods of startup, shutdown, and malfunction.

(ii) The coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by §63.4492 at all times except during periods of startup, shutdown, and malfunction, and except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.4561(j).

(iii) The coating operation(s) must be in compliance with the work practice standards in §63.4493 at all times.

(b) 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).

(c) If your affected source uses an emission capture system and add-on control device, you must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

§ 63.4501 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

§ 63.4510 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) Initial notification. 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 April 19, 2004, whichever is later. For an existing affected source, you must submit the initial notification no later than 1 year after April 19, 2004. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under §63.4481(d) to constitute compliance with this subpart for any or all of your plastic parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those plastic parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under §63.4481(e)(2) to constitute compliance with this subpart for your plastic parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those plastic parts coating operations.

(c) Notification of compliance *status.* You must submit the notification of compliance status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §63.4540, §63.4550, or §63.4560 that applies to your affected source. The notification of compliance status must contain the information specified in paragraphs (c)(1) through (11) 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 §63.4540, §63.4550, or §63.4560 that applies to your affected source.

(4) Identification of the compliance option or options specified in §63.4491 that you used on each coating operation 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 the applicable emission limit in §63.4490, include all the calculations you used to determine the kg (lb) organic HAP emitted per kg (lb) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports.

(7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to §63.4541(a), (b), or (c). You do not need to submit copies of any test reports.

(i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.

(ii) Mass fraction of coating solids for one coating.

(iii) Density for one coating, one thinner and/or other additive, and one cleaning material, except that if you use the compliant material option, only the example coating density is required.

(iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of §63.4551.

(8) The calculation of kg (lb) organic HAP emitted per kg (lb) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.

(i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 1 of §63.4541.

(ii) For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total mass of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of §63.4551.

(iii) For the emission rate with add-on controls option, provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of §63.4551; the calculation of the total mass of coating solids used each month using Equation 2 of §63.4551; the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.4561 and Equations 2, 3, and 3A through 3C of §63.4561, as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of §63.4561; and the calculation of the 12-month organic HAP emission rate using Equation 5 of §63.4561.

(9) For the emission rate with add-on controls option, you must include the information specified in paragraphs (c)(9)(i) through (iv) of this section, except that the requirements in paragraphs (c)(9)(i) through (iii) of this section do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to §63.4561(j).

(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 protocol 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.

(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.

(iv) A statement of whether or not you developed and implemented the work practice plan required by §63.4493.

(10) If you are complying with a single emission limit representing the predominant activity under §63.4490(c)(1), include the calculations and supporting information used to demonstrate that this emission limit represents the predominant activity as specified in §63.4490(c)(1).

(11) If you are complying with a facility-specific emission limit under §63.4490(c)(2), include the calculation of the facility-specific emission limit and any supporting information as specified in §63.4490(c)(2).

§ 63.4520 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 (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a)(2) of this section.

(1) *Dates.* Unless the Administrator has approved or agreed to 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. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(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 §63.4540, §63.4550, or §63.4560 that applies to your affected source and ends on June 30 or December 31, whichever date is the first date 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. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source

submits 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 limitation in this subpart, its submission will 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 the affected source 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 (vii) of this section, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of this section that is 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. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(iv) Identification of the compliance option or options specified in §63.4491 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates for each option you used.

(v) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§63.4491(b) or (c)), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.

(vi) If you used the predominant activity alternative (§63.4490(c)(1)), include the annual determination of predominant activity if it was not included in the previous semi-annual compliance report.

(vii) If you used the facility-specific emission limit alternative (§63.4490(c)(2)), include the calculation of the facility-specific emission limit for each 12-month compliance period during the 6-month reporting period.

(4) No deviations. If there were no deviations from the emission limitations in §§63.4490, 63.4492, and 63.4493 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 the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (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: Compliant material option.* If you used the compliant material option and there was a deviation from the applicable organic HAP content requirements

in §63.4490, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.

(i) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.

(ii) The calculation of the organic HAP content (using Equation 1 of §63.4541) for each coating identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).

(iii) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).

(iv) A statement of the cause of each deviation.

(6) *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in §63.4490, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of this section.

(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.4490.

(ii) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.4551; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

(iii) A statement of the cause of each deviation.

(7) *Deviations: Emission rate with add-on controls option.* If you used the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.

(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.4490.

(ii) The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of §63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of §63.4551; the calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.4561, and Equations 2, 3, and 3A through 3C of §63.4561, as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of §63.4561; and the calculation of the 12-month organic HAP emission rate using Equation 5 of §63.4561. You do not need to submit the background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

(iii) The date and time that each malfunction 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, time, and duration 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 any bypass of the 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 of each deviation from an operating limit in Table 1 to this subpart and each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.

(x) A breakdown of the total duration of the deviations from the operating limits in Table 1 of this subpart and bypasses of the 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 of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.

(xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device 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.

(b) *Performance test reports.* If you use the emission rate with add-on controls option, 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).

(c) Startup, *shutdown, malfunction reports.* If you used the emission rate with add-on controls option 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 startup, shutdown, and malfunction plan, 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 startup, shutdown, and malfunction plan, 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).

§ 63.4530 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. If you are using the predominant activity alternative under §63.4490(c), you must keep records of the data and calculations used to determine the predominant activity. If you are using the facility-specific emission limit alternative under §63.4490(c), you must keep records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration. You must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.

(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 and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or mass 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. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

(c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.

(1) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used.

(2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 1 of §63.4541.

(3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of §63.4551 and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of §63.4551; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.4551.

(4) For the emission rate with add-on controls option, records of the calculations specified in paragraphs (c)(4)(i) through (v) of this section.

(i) The calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of §63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4);

(ii) The calculation of the total mass of coating solids used each month using Equation 2 of §63.4551;

(iii) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.4561 and Equations 2, 3, and 3A through 3C of §63.4561, as applicable;

(iv) The calculation of each month's organic HAP emission rate using Equation 4 of §63.4561; and

(v) The calculation of each 12-month organic HAP emission rate using Equation 5 of §63.4561.

(d) A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If you are using the compliant material option for all coatings at the source, you may maintain purchase records for each material used rather than a record of the mass used.

(e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period.

(f) A record of the mass fraction of coating solids for each coating used during each compliance period.

(g) If you use an allowance in Equation 1 of §63.4551 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to §63.4551(e)(4), you must keep records of the information specified in paragraphs (g)(1) through (3) of this section.

(1) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of §63.4551, a statement of which

subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment.

(2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of §63.4551.

(3) The methodology used in accordance with §63.4551(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.

(h) You must keep records of the date, time, and duration of each deviation.

(i) If you use the emission rate with add-on controls option, you must keep the records specified in paragraphs (i)(1) through (8) of this section.

(1) For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) The records required to show continuous compliance with each operating limit specified in Table 1 to this subpart that applies to you.

(4) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in §63.4565(a).

(5) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§63.4564 and 63.4565(b) through (e), including the records specified in paragraphs (i)(5)(i) through (iii) of this section that apply to you.

(i) *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 204F 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 204E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(ii) Records for 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 204C 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 204E 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.

(iii) *Records for an alternative protocol.* Records needed to document a capture efficiency determination using an alternative method or protocol as specified in §63.4565(e), if applicable.

(6) The records specified in paragraphs (i)(6)(i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in §63.4566.

(i) Records of each add-on control device performance test conducted according to §§63.4564 and 63.4566.

(ii) 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.

(7) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in §63.4567 and to document compliance with the operating limits as specified in Table 1 to this subpart.

(8) A record of the work practice plan required by §63.4493 and documentation that you are implementing the plan on a continuous basis.

§ 63.4531 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) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on-site 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 the Compliant Material Option

§ 63.4540 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 in §63.4541. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th 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 that month plus the next 12 months. The initial compliance demonstration includes the calculations according to §63.4541 and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the applicable emission limit in §63.4490, and that you used no thinners and/or other additives, or cleaning materials that contained organic HAP as determined according to §63.4541(a).

§ 63.4541 How do I demonstrate initial compliance with the emission limitations?

You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in §63.4490 and must use no thinner and/or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §§63.4492 and 63.4493, respectively. You must conduct a separate initial compliance demonstration for each general use coating, TPO coating, automotive lamp coating, and assembled on-road vehicle coating affected source unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.

(a) *Determine the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning 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 Occupational Safety and Health Administration (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.,* 0.763).

(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. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you

may use the alternative method contained in appendix A to this subpart, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to this subpart, as a substitute for the 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. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. 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 you demonstrate to the satisfaction of the enforcement agency that the formulation 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 test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these 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 according to the instructions for Table 3, and you may use Table 4 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) 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 you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(b) Determine *the mass fraction of coating solids for each coating.* You must determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (b)(1) through (3) of this section.

(1) Method 24 (appendix A to 40 CFR part 60). Use Method 24 for determining the mass fraction of coating solids. For reactive adhesives in which some of the liquid fraction reacts to form solids, you may use the alternative method contained in appendix A to this subpart, rather than Method 24, to determine the mass fraction of coating solids.

(2) Alternative method. You may use an alternative test method for determining the solids content of each coating 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 obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(c) *Calculate the organic HAP content of each coating.* Calculate the organic HAP content, kg (lb) organic HAP emitted per kg (lb) coating solids used, of each coating used during the compliance period using Equation 1 of this section:

$$H_c = \frac{W_c}{S_c} \qquad (Eq.\ 1)$$

Where:
H_c = Organic HAP content of the coating, kg (lb) of organic HAP emitted per kg (lb) coating solids used.
Wc = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.
Sc = Mass fraction of coating solids, kg coating solids per kg coating, determined according to paragraph (b) of this section.

(d) Compliance *demonstration.* The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in §63.4490; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§63.4530 and 63.4531. As part of the notification of compliance status required in §63.4510, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.4490, and you used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in paragraph (a) of this section.

§ 63.4542 How do I demonstrate continuous compliance with the emission limitations?

(a) For each compliance period to demonstrate continuous compliance, you must use no coating for which the organic HAP content (determined using Equation 1 of §63.4541) exceeds the applicable emission limit in §63.4490, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to §63.4541(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in §63.4540, is the end of a compliance period consisting of that month and the preceding 11 months. If you are complying with a facility-specific emission limit under §63.4490(c), you must also perform the calculation using Equation 1 in §63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If you choose to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(5).

(c) As part of each semiannual compliance report required by §63.4520, you must identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in §63.4490, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.4490, and you used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to §63.4541(a).

(d) You must maintain records as specified in §§63.4530 and 63.4531.

Compliance Requirements for the Emission Rate Without Add-On Controls Option

§ 63.4550 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 §63.4551. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th 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 12 months. You must determine the mass of organic HAP emissions and mass of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to §63.4551 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.4490.

§ 63.4551 How do I demonstrate initial compliance with the emission limitations?

You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in §63.4490, but is not required to meet the operating limits or work practice standards in §§63.4492 and 63.4493, respectively. You must conduct a separate initial compliance demonstration for each general use, TPO, automotive lamp, and assembled on-road vehicle coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the emission rate without add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

(a) Determine the mass fraction of organic HAP for each material. Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in §63.4541(a).

(b) Determine the mass fraction of coating solids. Determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during each month according to the requirements in §63.4541(b).

(c) Determine the density of each material. Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475–98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–98 and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

(d) Determine the volume of each material used. Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

(e) Calculate the mass of organic HAP emissions. The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w \qquad (Eq.\ 1)$$

Where:
He = Total mass of organic HAP emissions 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 and/or other additives used during the month, kg, as calculated in Equation 1B of this section.
C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.
Rw = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of this section. (You may assign a value of zero to RW if you do not wish to use this allowance.)

(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.
Volc,i = Total volume of coating, i, used during the month, liters.
Dc,i = Density of coating, i, kg coating per liter coating.
Wc,i = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic

HAP that is emitted as determined using the method in appendix A to this subpart.
m = Number of different coatings used during the month.

(2) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^{n} (Vol_{t,j})(D_{t,j})(W_{t,j}) \qquad (Eq.\ 1B)$$

Where:
B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.
Volt,j = Total volume of thinner and/or other additive, j, used during the month, liters.
Dt,j = Density of thinner and/or other additive, j, kg per liter.
Wt,j = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.
n = Number of different thinners and/or other additives used during the month.

(3) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^{p} (Vol_{s,k})(D_{s,k})(W_{s,k}) \qquad (Eq.\ 1C)$$

Where:
C = Total mass of organic HAP in the cleaning materials used during the month, kg.
Vols,k = Total volume of cleaning material, k, used during the month, liters.
Ds,k = Density of cleaning material, k, kg per liter.
Ws,k = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.
p = Number of different cleaning materials used during the month.

(4) If you choose to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then you must determine the mass according to paragraphs (e)(4)(i) through (iv) of this section.

(i) You may only include waste materials in the determination that are generated by coating operations in the affected source for which you use Equation 1 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. You may not include organic HAP contained in wastewater.

(ii) You must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month.

(iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (e)(4)(ii) of this section.

(iv) You must document the methodology you use to determine the amount of waste materials and the total mass of organic HAP they contain, as required in §63.4530(g). If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.

(f) *Calculate the total mass of coating solids used.* Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$M_{st} = \sum_{i=1}^{m} (\mathrm{Vol}_{c,i})(\mathrm{D}_{c,i})(\mathrm{M}_{s,i}) \qquad (Eq.\ 2)$$

Where:
Mst = Total mas`s of coating solids used during the month, kg.
Volc,i = Total volume of coating, i, used during the month, liters.
Dc,i = Density of coating, i, kgs per liter coating, determined according to §63.4551(c).
Ms,i = Mass fraction of coating solids for coating, i, kgs solids per kg coating, determined according to §63.4541(b).
m = Number of coatings used during the month.

(g) Calculate *the organic HAP emission rate.* Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per kg (lb) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^{n} H_e}{\sum_{y=1}^{n} M_{st}} \qquad (Eq.\ 3)$$

Where:
Hyr = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.
He = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.
Mst = Total mass of coating solids used during month, y, kg, as calculated by Equation 2 of this section.
y = Identifier for months.
n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

(h) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the applicable emission limit for each subcategory in §63.4490 or the predominant activity or facility-specific emission limit allowed in §63.4490(c). You must keep all records as required by §§63.4530 and 63.4531. As part of the notification of compliance status required by §63.4510, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and 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 §63.4490, determined according to the procedures in this section.

§ 63.4552 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to §63.4551(a) through (g), must be less than or equal to the applicable emission limit in §63.4490. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.4550 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.4551(a) through (g) on a monthly basis using data from the previous 12 months of operation. If you are complying with a facility-specific emission limit under §63.4490(c), you must also perform the calculation using Equation 1 in §63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.4490, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(6).

(c) As part of each semiannual compliance report required by §63.4520, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (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 §63.4490, determined according to §63.4551(a) through (g).

(d) You must maintain records as specified in §§63.4530 and 63.4531.

Compliance Requirements for the Emission Rate With Add-On Controls Option

§ 63.4560 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 §63.4483. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.4561(j), you must conduct a performance test of each capture system and add-on control device according to §§63.4564, 63.4565, and 63.4566 and establish the operating limits required by §63.4492 no later than 180 days after the applicable compliance date specified in §63.4483. For a solvent recovery system for which you conduct liquid-liquid material balances according to §63.4561(j), you must initiate the first material balance no later than the applicable compliance date specified in §63.4483.

(2) You must develop and begin implementing the work practice plan required by §63.4493 no later than the compliance date specified in §63.4483.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.4561. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th 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 12 months. You must determine the mass of organic HAP emissions and mass of coatings solids used each month and then calculate an organic HAP emission rate at the end of 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 §§63.4564, 63.4565, and 63.4566; results of liquid-liquid material balances conducted according to §63.4561(j); calculations according to §63.4561 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.4490; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by §63.4568; and documentation of whether you developed and implemented the work practice plan required by §63.4493.

(4) You do not need to comply with the operating limits for the emission capture system and add-on control device required by §63.4492 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 continuous parameter monitors 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. The requirements in this paragraph (a)(4) do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements in §63.4561(j).

(b) Intentionally omitted.

(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 or control device. 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 must 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, with or without adjustments, 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.

§ 63.4561 How do I demonstrate initial compliance?

(a) You may use the emission rate with add-on controls option for any coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source. You may include both controlled and uncontrolled coating operations in a group for which you use this option. You must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for which you do not use the emission rate with add-on controls option. To demonstrate initial compliance, the coating operation(s) for which you use the emission rate with add-on controls option must meet the applicable emission limitations in §§63.4490, 63.4492, and 63.4493. You must conduct a separate initial compliance demonstration for each general use, TPO, automotive lamp, and assembled on-road vehicle coating operation, unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate without add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed onsite (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coatings operation(s) for which you use the emission rate with add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

(b) Compliance with operating limits. Except as provided in §63.4560(a)(4), and except for solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements of paragraph (j) of this section, you must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by §63.4492, using the procedures specified in §§63.4567 and 63.4568.

(c) Compliance with work practice requirements. You must develop, implement, and document your implementation of the work practice plan required by §63.4493 during the initial compliance period, as specified in §63.4530.

(d) Compliance with emission limits. You must follow the procedures in paragraphs (e) through (n) of this section to demonstrate compliance with the applicable emission limit in §63.4490 for each affected source in each subcategory.

(e) Determine the mass fraction of organic HAP, density, volume used, and mass fraction of coating solids. Follow the procedures specified in §63.4551(a) through (d) to determine the mass fraction of organic HAP, density, and volume of each coating, thinner and/or other additive, and cleaning material used during each month; and the mass fraction of coating solids for each coating used during each month.

(f) Calculate the total mass of organic HAP emissions before add-on controls. Using Equation 1 of §63.4551, calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners and/or other additives, and cleaning materials used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option.

(g) 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 that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (h) 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 (j) of this section to calculate the organic HAP emission reduction.

(h) *Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid* material *balance.* Use Equation 1 of this section to calculate the 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. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during each month. You must assume zero efficiency for the emission capture system and add-on control device for any period of time a deviation specified in §63.4563(c) or (d) occurs in the controlled coating operation, including a deviation during a period of startup, shutdown, or malfunction, unless you have other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator. Equation 1 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.

$$H_C = \left(A_C + B_C + C_C - R_W - H_{UNC}\right)\left(\frac{CE}{100} \times \frac{DRE}{100}\right) \qquad (Eq.\ 1)$$

Where:
HC = Mass of organic HAP emission reduction for the controlled coating operation during the month, kg.
AC = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 1A of this section.
BC = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg, as calculated in Equation 1B of this section.
CC = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg, as calculated in Equation 1C of this section.
Rw = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, kg, determined according to §63.4951(e)(4). (You may assign a value of zero to Rw if you do not wish to use this allowance.)
HUNC = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.4563(c) and (d) that occurred during the month in the controlled coating operation, kg, as calculated in Equation 1D 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 §§63.4564 and 63.4565 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 §§63.4564 and 63.4566 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 (lb), using Equation 1A of this section:

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

Where:

AC = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg.
Volc,i = Total volume of coating, i, used during the month, liters.
Dc,i = Density of coating, i, kg per liter.
Wc,i = Mass fraction of organic HAP in coating, i, kg per kg. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.
m = Number of different coatings used.

(2) Calculate the mass of organic HAP in the thinners and/or other additives used in the controlled coating operation, kg (lb), using Equation 1B of this section:

$$B_C = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(\mathrm{D}_{t,j}\right)\left(\mathrm{W}_{t,j}\right) \qquad (Eq.\ 1\mathrm{B})$$

Where:
BC = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg.
Volt,j = Total volume of thinner and/or other additive, j, used during the month, liters.
Dt,j = Density of thinner and/or other additive, j, kg per liter.
Wt,j = Mass fraction of organic HAP in thinner and/or other additive, j, kg per kg. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.
n = Number of different thinners and/or other additives used.

(3) Calculate the mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg (lb), using Equation 1C of this section:

$$C_C = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(\mathrm{D}_{s,k}\right)\left(W_{s,k}\right) \qquad (Eq.\ 1\mathrm{C})$$

Where:
CC = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg.
Vols,k = Total volume of cleaning material, k, used during the month, liters.
Ds,k = Density of cleaning material, k, kg per liter.
Ws,k = Mass fraction of organic HAP in cleaning material, k, kg per kg.
p = Number of different cleaning materials used.

(4) Calculate the mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used in the controlled coating operation during deviations specified in §63.4563(c) and (d), using Equation 1D of this section:

$$H_{UNC} = \sum_{h=1}^{q} \left(\mathrm{Vol}_{h}\right)\left(\mathrm{D}_{h}\right)\left(\mathrm{W}_{h}\right) \qquad (Eq.\ 1\mathrm{D})$$

Where:
HUNC = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.4563(c) and (d) that occurred during the month in the controlled coating operation, kg.
Volh = Total volume of coating, thinner and/or other additive, or cleaning material, h, used in the controlled coating operation during deviations, liters.

Dh = Density of coating, thinner and/or other additives, or cleaning material, h, kg per liter.
Wh = Mass fraction of organic HAP in coating, thinner and/or other additives, or cleaning material, h, kg organic HAP per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.
q = Number of different coatings, thinners and/or other additives, and cleaning materials used.

(i) [Reserved]

(j) 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 organic HAP emission reduction by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are 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 (j)(1) through (6) of this section. Calculate the mass of organic HAP emission reduction by the solvent recovery system as specified in paragraph (j)(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, based on measurement with the device required in paragraph (j)(1) of this section.

(3) Determine the mass fraction of volatile organic matter for each coating, thinner and/or other additive, and cleaning material 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 take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(4) Determine the density of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg per liter, according to §63.4551(c).

(5) Measure the volume of each coating, thinner and/or other additive, and cleaning material 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 2 of this section:

$$R_V = 100 \frac{M_{VR}}{\sum_{i=1}^{m} Vol_i D_i WV_{c,i} + \sum_{j=1}^{n} Vol_j D_j WV_{t,j} + \sum_{k=1}^{p} Vol_k D_k WV_{s,k}} \qquad (Eq.\ 2)$$

Where:
RV = Volatile organic matter collection and recovery efficiency of the solvent recovery system during the month, percent.
MVR = Mass of volatile organic matter recovered by the solvent recovery system during the month, kg.
Voli = Volume of coating, i, used in the coating operation controlled by the solvent recovery system during the month, liters.
Di = Density of coating, i, kg per liter.
WVc,i = Mass fraction of volatile organic matter for coating, i, kg volatile organic matter per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.
Volj = Volume of thinner and/or other additive, j, used in the coating operation controlled by the solvent recovery system during the month, liters.
Dj = Density of thinner and/or other additive, j, kg per liter.
WVt,j = Mass fraction of volatile organic matter for thinner and/or other additive, j, kg volatile organic matter per kg thinner and/or other additive. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.
Volk = Volume of cleaning material, k, used in the coating operation controlled by the solvent recovery system during the month, liters.
Dk = Density of cleaning material, k, kg per liter.
WVs,k = Mass fraction of volatile organic matter for cleaning material, k, kg volatile organic matter per kg cleaning material.
m = Number of different coatings used in the coating operation controlled by the solvent recovery system during the month.
n = Number of different thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month.
p = Number of different cleaning materials 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 3 of this section and according to paragraphs (j)(7)(i) through (iii) of this section:

$$H_{CSR} = \left(A_{CSR} + B_{CSR} + C_{CSR}\right)\left(\frac{R_V}{100}\right) \qquad (Eq.\ 3)$$

Where:
HCSR = 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.
ACSR = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3A of this section.
BCSR = Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3B of this section.
CCSR = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3C of this section.

RV = Volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 2 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 3A of this section.

$$A_{CSR} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \quad (Eq.\ 3A)$$

Where:
ACSR = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system during the month, kg.
Volc,i = Total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters.
Dc,i = Density of coating, i, kg per liter.
Wc,i = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.
m = Number of different coatings used.

(ii) Calculate the mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, using Equation 3B of this section:

$$B_{CSR} = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \quad (Eq.\ 3B)$$

Where:
BCSR = Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month, kg.
Volt,j = Total volume of thinner and/or other additive, j, used during the month in the coating operation controlled by the solvent recovery system, liters.
Dt,j = Density of thinner and/or other additive, j, kg per liter.
Wt,j = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.
n = Number of different thinners and/or other additives used.

(iii) Calculate the mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg, using Equation 3C of this section:

$$C_{CSR} = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(D_{s,k}\right)\left(W_{s,k}\right) \quad (Eq.\ 3C)$$

Where:
CCSR = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg.
Vols,k = Total volume of cleaning material, k, used during the month in the coating operation controlled by the solvent recovery system, liters.
Ds,k = Density of cleaning material, k, kg per liter.

Ws,k = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg cleaning material.
p = Number of different cleaning materials used.

(k) Calculate the total mass of coating solids used. Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option, using Equation 2 of §63.4551.

(l) *Calculate the* mass *of organic HAP emissions for each month.* Determine the mass of organic HAP emissions, kg, during each month, using Equation 4 of this section:

$$H_{HAP} = H_e - \sum_{i=1}^{q}\left(H_{C,i}\right) - \sum_{j=1}^{r}\left(H_{CSR,j}\right) \qquad (Eq.\ 4)$$

Where:
H_{HAP} = Total mass of organic HAP emissions for the month, kg.
He = Total mass of organic HAP emissions before add-on controls from all the coatings, thinners and/or other additives, and cleaning materials used during the month, kg, determined according to paragraph (f) of this section.
HC,i = Total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, during the month, kg, from Equation 1 of this section.
HCSR,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 3 of this section.
q = Number of controlled coating operations not controlled by a solvent recovery system using a liquid-liquid material balance.
r = Number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

(m) *Calculate the organic HAP emission rate for the compliance period.* Determine the organic HAP emission rate for the compliance period, kg (lb) of organic HAP emitted per kg (lb) coating solids used, using Equation 5 of this section:

$$H_{annual} = \frac{\sum_{y=1}^{n} H_{HAP,y}}{\sum_{y=1}^{n} M_{st,y}} \qquad (Eq.\ 5)$$

Where:
Hannual = Organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.
HHAP,y = Organic HAP emissions for month, y, kg, determined according to Equation 4 of this section.
Mst,y = Total mass of coating solids used during month, y, kg, from Equation 2 of §63.4551.
y = Identifier for months.
n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

(n) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit for each subcategory in §63.4490 or the predominant activity or facility-specific emission limit allowed in §63.4490(c). You must keep all records as required by §§63.4530 and 63.4531. As part of the notification of compliance status required by §63.4510, you must identify the coating operation(s) for which you used the emission rate with add-on controls option and 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 §63.4490, and you achieved the operating limits required by §63.4492 and the work practice standards required by §63.4493.

§ 63.4562 [Reserved]

§ 63.4563 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance with the applicable emission limit in §63.4490, the organic HAP emission rate for each compliance period, determined according to the procedures in §63.4561, must be equal to or less than the applicable emission limit in §63.4490. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.4560 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.4561 on a monthly basis using data from the previous 12 months of operation. If you are complying with a facility-specific emission limit under §63.4490(c), you must also perform the calculation using Equation 1 in §63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.4490, this is a deviation from the emission limitation for that compliance period that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7).

(c) You must demonstrate continuous compliance with each operating limit required by §63.4492 that applies to you, as specified in Table 1 to this subpart, when the coating line is in operation.

(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 §§63.4510(c)(6) and 63.4520(a)(7).

(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, unless you have other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator.

(d) You must meet the requirements for bypass lines in §63.4568(b) for controlled coating operations for which you do not 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 §§63.4510(c)(6) and 63.4520(a)(7). For the purposes of completing the compliance calculations specified in §§63.4561(h), you must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated in Equation 1 of §63.4561.

(e) You must demonstrate continuous compliance with the work practice standards in §63.4493. If you did not develop a work practice plan, or you did not implement the plan, or you did not keep the records required by §63.4530(i)(8), this is a deviation from the work practice standards that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7).

(f) As part of each semiannual compliance report required in §63.4520, you must identify the coating operation(s) for which you used the emission rate with add-on controls option. If there were no deviations from the emission limitations, submit a statement 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 §63.4490, and you achieved the operating limits required by §63.4492 and the work practice standards required by §63.4493 during each compliance period.

(g)–(i) [Reserved]

(j) You must maintain records as specified in §§63.4530 and 63.4531.

§ 63.4564 What are the general requirements for performance tests?

(a) You must conduct each performance test required by §63.4560 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 §63.4565. You must conduct each performance test of an add-on control device according to the requirements in §63.4566.

§ 63.4565 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 §63.4560.

(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, thinners and/or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to 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 three protocols described in paragraphs (c), (d), and (e) 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 the production, which includes surface preparation activities and drying and 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, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials 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 204F of appendix M to 40 CFR part 51 to determine the mass fraction of TVH liquid input from each coating, thinner and/or other additive, and cleaning material 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, thinners and/or other additives, and cleaning materials used in the coating operation during each capture efficiency test run:

$$TVH_{used}=\sum_{i=1}^{n}(TVH_i)(Vol_i)(D_i) \quad (Eq.\ 1)$$

Where:
TVHused = Mass of liquid TVH in materials used in the coating operation during the capture efficiency test run, kg.
TVHi = Mass fraction of TVH in coating, thinner and/or other additive, or cleaning material, i, that is used in the coating operation during the capture efficiency test run, kg TVH per kg material.
Voli = Total volume of coating, thinner and/or other additive, or cleaning material, i, used in the coating operation during the capture efficiency test run, liters.
Di = Density of coating, thinner and/or other additive, or cleaning material, i, kg material per liter material.
n = Number of different coatings, thinners and/or other additives, and cleaning materials used in the coating operation during the capture efficiency test run.

(4) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system. They are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.

(ii) Use Method 204E of appendix M to 40 CFR 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(5) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 2 of this section:

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

Where:
CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.
TVHused = Total mass of TVH liquid input used in the coating operation during the capture efficiency test run, kg.
TVHuncaptured = 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, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials 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 204C of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) The sampling points for the Method 204B or 204C measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and entering the add-on control device.

(ii) If multiple emission streams from the capture system enter the add-on control device without a single common duct, then the emissions entering the add-on control device must be simultaneously measured in each duct and the total emissions entering the add-on control device must be determined.

(3) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.

(ii) Use Method 204E of appendix M to 40 CFR part 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the 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:

$$CE = \frac{TVH_{captured}}{\left(TVH_{captured} + TVH_{uncaptured}\right)} \times 100 \qquad (Eq.\ 3)$$

Where:
CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.
TVHcaptured = 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.
TVHuncaptured = 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) *Alternative capture efficiency protocol.* As an alternative to the procedures specified in paragraphs (c) and (d) of this section and subject to the approval of the Administrator, 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.

§ 63.4566 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 §63.4560. 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.

(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.

(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 (ppm) 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 ppm or less at the control device outlet.

(3) Use Method 25A if the add-on 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 to the atmosphere of each device. For example, if one add-on control device is a concentrator with an outlet to the atmosphere 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 to the atmosphere 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:

$$M_f = Q_{sd} C_c (12)(0.0416)(10^{-6}) \quad (Eq.\ 1)$$

Where:
Mf = Total gaseous organic emissions mass flow rate, kg/per hour (h).

Cc = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis.
Qsd = Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h).
0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m 3) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(e) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100 \qquad (Eq.\ 2)$$

Where:
DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent.
Mfi = 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.
Mfo = 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.

§ 63.4567 How do I establish the emission capture system and add-on control device operating limits during the performance test?

During the performance test required by §63.4560 and described in §§63.4564, 63.4565, and 63.4566, you must establish the operating limits required by §63.4492 according to this section, unless you have received approval for alternative monitoring and operating limits under §63.8(f) as specified in §63.4492.

(a) *Thermal* oxidizers*.* If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) Intentionally omitted.

(c) Intentionally omitted.

(d) Intentionally omitted.

(e) Intentionally omitted.

(f) *Emission capture systems.* For each capture device that is not part of a PTE that meets the criteria of §63.4565(a), 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 §63.4560 and described in §§63.4564 and 63.4565, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

(2) Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

§ 63.4568 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 (v) 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.

(v) *Flow direction* indicator. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow direction 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. Each time the flow direction changes, the next reading of the time of occurrence and flow direction must be recorded. The flow direction indicator must be installed in each bypass line or air makeup supply line that could divert the emissions away from the add-on control device to the atmosphere.

(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 §63.4520.

(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 with concentrators or with carbon adsorbers to treat desorbed concentrate streams), 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 gas temperature monitors upstream and/or downstream of the catalyst bed as required in §63.3967(b).

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (v) 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 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger.

(iii) Before using the sensor for the first time or when relocating or replacing the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature.

(iv) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices.

(v) Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used.

(d) Intentionally omitted.

(e) Intentionally omitted.

(f) Intentionally omitted.

(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) and (g)(1)(i) through (vii) 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) Use a flow sensor with an accuracy of at least 10 percent of the flow.

(iii) Perform an initial sensor calibration in accordance with the manufacturer's requirements.

(iv) Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.

(v) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.

(vi) Perform leak checks monthly.

(vii) Perform visual inspections of the sensor system quarterly if there is no redundant sensor.

(2) For each pressure drop measurement device, you must comply with the requirements in paragraphs (a) and (g)(2)(i) through (vii) of this section.

(i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening you are monitoring.

(ii) Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.

(iii) Perform an initial calibration of the sensor according to the manufacturer's requirements.

(iv) Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

(v) Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

(vi) Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.

(vii) Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.

Other Requirements and Information

§ 63.4580 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (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 the 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 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 requirements in §§63.4481 through 4483 and §§63.4490 through 4493.

(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.

§ 63.4581 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

Additive means a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

Add-on control 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.

Adhesive, adhesive coating means any chemical substance that is applied for the purpose of bonding two surfaces together. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

Assembled on-road vehicle coating means any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not include surface coating operations that meet the applicability criteria of the Automobiles and Light-Duty Trucks NESHAP. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

Automotive lamp coating means any coating operation in which coating is applied to the surface of some component of the body of an exterior automotive lamp, including the application of reflective argent coatings and clear topcoats. Exterior automotive lamps include head lamps, tail lamps, turn signals, brake lights, and side marker lights. Automotive lamp coating does not include any coating operation performed on an assembled on-road vehicle.

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 or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, 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.

Cleaning material means a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (e.g., depainting), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, 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, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be pre-coated with an adhesive by the film manufacturer, are not considered coatings for the purposes of this subpart. A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol).

Coating operation means equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.

Coatings solids means the nonvolatile portion of the coating that makes up the dry film.

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 an emission capture system and add-on control device.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including but not limited to, any emission limit or operating limit or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission 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.

Emission limitation means the aggregate of all requirements associated with a compliance option including emission limit, operating limit, work practice standard, etc.

Enclosure means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

Exempt compound means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

Facility maintenance means the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

General use coating means any coating operation that is not an automotive lamp, TPO, or assembled on-road vehicle coating operation.

Hobby shop means any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

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 §63.4541. 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 coating solids means the ratio of the mass of solids (also known as the mass of nonvolatiles) to the mass of a coating in which it is contained; kg of coating solids per kg of coating.

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.

Non-HAP coating means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP.

Organic HAP content means the mass of organic HAP emitted per mass of coating solids used for a coating calculated using Equation 1 of §63.4541. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, organic HAP content is the mass of organic HAP that is emitted, rather than the organic HAP content of the coating as it is received.

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.

Personal watercraft means a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

Plastic part and product means any piece or combination of pieces of which at least one has been formed from one or more resins. Such pieces may be solid, porous, flexible or rigid.

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.

Reactive adhesive means adhesive systems composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least 70 percent of the liquid components of the system, excluding water, react during the process.

Research or laboratory facility means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in 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.

Startup, initial means the first time equipment is brought online in a facility.

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.

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.

Thermoplastic olefin (TPO) means polyolefins (blends of polypropylene, polyethylene and its copolymers). This also includes blends of TPO with polypropylene and polypropylene alloys including, but not limited to, thermoplastic elastomer (TPE), TPE polyurethane (TPU), TPE polyester (TPEE), TPE polyamide (TPAE), and thermoplastic elastomer polyvinyl chloride (TPVC).

Thermoplastic olefin (TPO) coating means any coating operation in which the coatings are components of a system of coatings applied to a TPO substrate, including adhesion promoters, primers, color coatings, clear coatings and topcoats. Thermoplastic olefin coating does not include the coating of TPO substrates on assembled on-road vehicles.

Thinner means an organic solvent that is added to a coating after the coating is received from the supplier.

Total volatile hydrocarbon (TVH) means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F 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.

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.

Volatile organic compound (VOC) means any compound defined as VOC in 40 CFR 51.100(s).

Wastewater means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

If you are required to comply with operating limits by §63.4491(c), you must comply with the applicable operating limits in the following table:

Table 1 to Subpart PPPP of Part 63—Operating Limits if Using the Emission Rate With Add-On Controls Option

[If you are required to comply with operating limits by § 63.4491(c), 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 compliance with 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 § 63.4567(a).	i. Collecting the combustion temperature data according to § 63.4568(c); ii. Reducing the data to 3- hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above the temperature limit.
2. Intentionally omitted.		
3. Intentionally omitted.		
4. Intentionally omitted.		
5. Intentionally omitted.		
6. Emission capture system that is a PTE according to § 63.4565(a).	a.The direction of the air flow at all times must be into the enclosure; and either	i. Collecting air flow at all times the direction of air flow, and either the facial velocity of air through all natural draft openings according to § 63.4568(g)(1) or the pressure drop across the enclosure according to § 63.4568(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.
	b. The average facial velocity of air through all natural draft be at least 200 feet per minute; or	i. See items 6.a.i and 6.a.ii.

7. Emission capture system that is not a PTE according to § 63.4565(a).	openings in the enclosure must c. The pressure drop across the enclosure must be at least 0.007 inch H2O, as established in Method 204 of appendix M to 40 CFR part 51. 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 § 63.4567(f).	i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to § 63.4568(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.

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63

[You must comply with the applicable General Provisions requirements according to the following table]

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 63.1(a)(1)-(14).	General Applicability.	Yes.	
§ 63.1(b)(1)-(3) .	Initial Applicability Determination.	Yes.	Applicability to subpart PPPP is also specified in § 63.4481.
§ 63.1(c)(1).	Applicability After Standard Established.	Yes.	
§ 63.1(c)(2)-(3).	Applicability of Permit Program for Area Sources.	No.	Area sources are not subject to subpart PPPP.
§ 63.1(c)(4)-(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 § 63.4581.
§ 63.3(a)-(c).	Units and Abbreviations.	Yes.	

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63

[You must comply with the applicable General Provisions requirements according to the following table]

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 63.4(a)(1)-(5).	Prohibited Activities.	Yes.	
§ 63.4(b)-(c).	Circumvention/ Severability.	Yes.	
§ 63.5(a).	Construction/ Reconstruction.	Yes.	
§ 63.5(b)(1)-(6).	Requirements for Existing, Newly Constructed, and Reconstructed Sources.	Yes.	
§ 63.5(d).	Application for Approval of Construction/ Reconstruction.	Yes.	
§ 63.5(e).	Approval of Construction/ Reconstruction.	Yes.	
§ 63.5(f).	Approval of Construction/ Reconstruction Based on Prior State Review.	Yes.	
§ 63.6(a).	Compliance With Standards and Maintenance Requirements_Applicab ility.	Yes.	
§ 63.6(b)(1)-(7).	Compliance Dates for New and Reconstructed Sources.	Yes.	Section 63.4483 specifies the compliance dates.
§ 63.6(c)(1)-(5).	Compliance Dates for Existing Sources.	Yes	Section 63.4483 specifies the compliance dates.
§ 63.6(e)(1)-(2).	Operation and Maintenance.	Yes.	
§ 63.6(e)(3).	Startup, Shutdown, and Malfunction Plan.	Yes.	Only sources using an add-on control device to comply with the standard must complete startup, shutdown, and malfunction plans.

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63

[You must comply with the applicable General Provisions requirements according to the following table]

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 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 standard.
§ 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 PPPP does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)-(16).	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 §§ 63.4564, 63.4565, and 63.4566.
§ 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 63.4560 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3).	Performance Tests Required By the Administrator.	Yes.	

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63

[You must comply with the applicable General Provisions requirements according to the following table]

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 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 Alternative Test Method.	Yes.	Applies to all test methods except those of 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 § 63.4568.
§ 63.8(a)(4).	Additional Monitoring Requirements.	No	Subpart PPPP 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 standard. Additional requirements for CMS operations and maintenance are specified in § 63.4568.
§ 63.8(c)(4).	CMS.		No. Section 63.4568 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5).	COMS.	No.	Subpart PPPP does not have opacity or visible emission standards.

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63

[You must comply with the applicable General Provisions requirements according to the following table]

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 63.8(c)(6).	CMS Requirements.	No.	Section 63.4568 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7).	CMS Out-of-Control Periods.	Yes.	
§ 63.8(c)(8).	CMS Out-of-Control Periods and Reporting.	No.	Section 63.4520 requires reporting of CMS out-of-control periods.
§ 63.8(d)-(e).	Quality Control Program and CMS Performance Evaluation.	No	Subpart PPPP 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 PPPP does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)-(5).	Data Reduction.	No.	Sections 63.4567 and 63.4568 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 PPPP does not have opacity or visible emission standards.
§ 63.9(g)(1)-(3).	Additional Notifications When Using CMS.	No...	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.9(h).	Notification of Compliance Status.	Yes	Section 63.4510 specifies the dates for submitting the notification of compliance status.

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63

[You must comply with the applicable General Provisions requirements according to the following table]

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 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 §§ 63.4530 and 63.4531.
§ 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 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 PPPP does not require the use of continuous emissions monitoring systems.
§ 63.10(b)(2) (xiv).		Yes.	
§ 63.10(b)(3).	Recordkeeping Requirements for Applicability Determinations.	Yes.	
§ 63.10(c)(1)-(6).	Additional Recordkeeping Requirements for Sources with CMS.	Yes	
§ 63.10(c)(7)-(8).		No	The same records are required in § 63.4520(a)(7).
§ 63.10(c)(9)-(15).		Yes.	

Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63

[You must comply with the applicable General Provisions requirements according to the following table]

Citation	Subject	Applicable to subpart PPPP	Explanation
§ 63.10(d)(1).	General Reporting Requirements.	Yes.	Additional requirements are specified in § 63.4520.
§ 63.10(d)(2).	Report of Performance Test Results.	Yes	Additional requirements are specified in § 63.4520(b).
§ 63.10(d)(3).	Reporting Opacity or Visible Emissions Observations.	No	Subpart PPPP 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 add-on control devices at sources using these to comply with the standards.
§ 63.10(e)(1)-(2).	Additional CMS Reports	No	Subpart PPPP does not require the use of continuous emissions monitoring systems.
§ 63.10(e)(3).	Excess Emissions/CMS Performance Reports.	No.	Section 63.4520(b) specifies the contents of periodic compliance reports.
§ 63.10(e)(4).	COMS Data Reports	No.	Subpart PPPP does not specify requirements for opacity or COMS.
§ 63.10(f).	Recordkeeping/ Reporting Waiver.	Yes.	
§ 63.11.	Control Device Requirements/Flares.	No.	Subpart PPPP 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 PPPP 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 and which match either the solvent blend name or the chemical abstract series (CAS) number. If a solvent blend matches both the name and CAS number for an entry, that entry's organic HAP mass fraction must be used for that solvent blend. Otherwise, use the organic HAP mass fraction for the entry matching either the solvent blend name or CAS number, or use the organic HAP mass fraction from table 4 to this subpart if neither the name or CAS number match.]

Solvent/solvent blend	Average organic CAS. No. fraction	HAP mass	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 PPPP 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]

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 by either solvent blend name or CAS number and you only know whether the blend is aliphatic or aromatic.

\b\ 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\ Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

Appendix A to Subpart PPPP of Part 63—Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives

1.0 Applicability and Principle

1.1 *Applicability:* This method applies to the determination of weight volatile matter content and weight solids content for most one-part or multiple-part reactive adhesives. Reactive adhesives are composed, in large part, of monomers that react during the adhesive curing reaction, and, as a result, do not volatilize. The monomers become integral parts of the cured adhesive through chemical reaction. At least 70 weight percent of the system, excluding water and non-volatile solids such as fillers, react during the process. This method is not appropriate for cyanoacrylates. For cyanoacrylates, South Coast Air Quality Management District Test Method 316B should be used. This method is not appropriate for one-part moisture cure urethane adhesives or for silicone adhesives. For one-part moisture cure urethane adhesives and for silicone adhesives, EPA Method 24 should be used.

1.2 Principle: One-part and multiple-part reactive adhesives undergo a reactive conversion from liquid to solid during the application and assembly process. Reactive adhesives are applied to a single surface, but then are usually quickly covered with another mating surface to achieve a bonded assembly. The monomers employed in such systems typically react and are converted to non-volatile solids. If left uncovered, as in a Method 24 (ASTM D2369) test, the reaction is inhibited by the presence of oxygen and volatile loss of the reactive components competes more heavily with the cure reaction. If this were to happen under normal use conditions, the adhesives would not provide adequate performance. This method minimizes this undesirable deterioration of the adhesive performance.

2.0 Materials and Apparatus

2.1 Aluminum foil, aluminum sheet, non-leaching plastic film or non-leaching plastic sheet, approximately 3 inches by 3 inches. Precondition the foil, film, or sheet for 30 minutes in an oven at 110 ±5 degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the foil, film, or sheet.

2.2 Flat, rigid support panels slightly larger than the foil, film, or sheet. Polypropylene with a minimum thickness of 1/8 inch is recommended for the support panels. Precondition the support panels for 30 minutes in an oven at 110 ±5 degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the support panels.

2.3 Aluminum spacers, 1/8 inch thick. Precondition the spacers for 30 minutes in an oven at 110 ±5 degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the spacers.

2.4 Forced draft oven, type IIA or IIB as specified in ASTM E145–94 (Reapproved 2001), "Standard Specification for Gravity-Convection and Forced-Ventilation Ovens" (incorporated by reference, see §63.14).

2.5 Electronic balance capable of weighing to ±0.0001 grams (0.1 mg).

2.6 Flat bottom weight (approximately 3 lbs) or clamps.

Material and Apparatus Notes

1—The foil, film, or sheet should be thick or rigid enough so that it can be easily handled in the test procedure.

3.0 Procedure

3.1 Two procedures are provided. In Procedure A the initial specimen weight is determined by weighing the foil, film, or sheet before and after the specimen is dispensed onto the foil, film, or sheet. In Procedure B the initial specimen weight is determined by weighing the adhesive cartridge (kit) before and after the specimen is dispensed.

3.2 At least four test specimens should be run for each test material. Run the test at room temperature, 74 degrees Fahrenheit (23 degrees Celsius).

Procedure A

1. Zero electronic balance.

2. Place 2 pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.

3. Record weight of aluminum foils. (A).

4. Tare balance.

5. Remove top piece of aluminum foil.

6. Dispense a 10 to 15 gram specimen of premixed adhesive onto bottom piece of aluminum foil. Place second piece of aluminum foil on top of the adhesive specimen to make a sandwich.

7. Record weight of sandwich (specimen and aluminum foils). (B).

8. Remove sandwich from scale, place sandwich between two support panels with aluminum spacers at the edges of the support panels to make a supported sandwich. The spacers provide a standard gap. Take care to mate the edges.

9. Place the supported sandwich on a flat surface.

10. Place the weight on top of the supported sandwich to spread the adhesive specimen to a uniform thickness within the sandwich. Check that no adhesive squeezes out from between the pieces of aluminum foil or through tears in the aluminum foil.

11. Allow to cure 24 hours.

12. Remove the sandwich from between the support panels. Record the weight of the sandwich. This is referred to as the 24 hr weight. (C).

13. Bake sandwich at 110 degrees Celsius for 1 hour.

14. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature. Record post bake sandwich weight. (D).

Procedure B

1. Zero electronic balance.

2. Place two pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.

3. Record weight of aluminum foils. (A).

4. Tare balance.

5. Place one support panel on flat surface. Place first piece of aluminum foil on top of this support panel.

6. Record the weight of a pre-mixed sample of adhesive in its container. If dispensing the adhesive from a cartridge (kit), record the weight of the cartridge (kit) plus any dispensing tips. (F).

7. Dispense a 10 to 15 gram specimen of mixed adhesive onto the first piece of aluminum foil. Place second piece of aluminum foil on top of the adhesive specimen to make a sandwich.

8. Record weight of the adhesive container. If dispensing the adhesive from a cartridge (kit), record the weight of the cartridge (kit) plus any dispensing tips. (G).

9. Place the aluminum spacers at the edges of the bottom support panel polypropylene sheet. The spacers provide a standard gap.

10. Place the second support panel on top of the assembly to make a supported sandwich. Take care to mate the edges.

11. Place the supported sandwich on a flat surface.

12. Place the weight on top of the supported sandwich to spread the adhesive specimen to a uniform thickness within the sandwich. Check that no adhesive squeezes out from between the pieces of aluminum foil or through tears in the aluminum foil.

13. Allow to cure 24 hours.

14. Remove the sandwich from between the support panels. Record the weight of the sandwich. This is referred to as the 24 hr weight. (C).

15. Bake sandwich at 110 degrees Celsius for 1 hour.

16. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature.

17. Record post-bake sandwich weight. (D).

Procedural Notes

1—The support panels may be omitted if the aluminum foil (or aluminum sheet, plastic film, or plastic sheet) will not tear and the adhesive specimen will spread to a uniform thickness within the sandwich when the flat weight is placed directly on top of the sandwich.

2—Clamps may be used instead of a flat bottom weight to spread the adhesive specimen to a uniform thickness within the sandwich.

3—When dispensing from a static mixer, purging is necessary to ensure uniform, homogeneous specimens. The weighing in Procedure B, Step 6 must be performed after any purging.

4—Follow the adhesive manufacturer's directions for mixing and for dispensing from a cartridge (kit).

4.0 Calculations

4.1 The total weight loss from curing and baking of each specimen is used to determine the weight percent volatile matter content of that specimen

Procedure A

Weight of original specimen (S) = (B)−(A)

Weight of post-bake specimen (P) = (D)−(A)

Total Weight Loss (L) = (S)−(P)

Procedure B

Weight of original specimen (S) = (F)−(G)

Weight of post-bake specimen (P) = (D)−(A)

Total Weight Loss (L) = (S)−(P)

Procedure A and Procedure B

Weight Percent Volatile Matter Content

(V) = [(Total weight loss)/(Initial specimen weight)] × 100 = [(L)/(S)] × 100

4.2 The weight volatile matter content of a material is the average of the weight volatile matter content of each specimen of that material. For example, if four specimens of a material were tested, then the weight percent volatile matter content for that material is:

V = [V1 + V2 + V3 + V4]/4

Where:

Vi = the weight percent volatile matter content of specimen i of the material.

4.3 The weight percent solids content of the material is calculated from the weight percent volatile content of the material.

Weight Percent Solids Content (N) = 100−(V)

Calculation Notes

1—The weight loss during curing and the weight loss during baking may be calculated separately. These values may be useful for identifying sources of variation in the results obtained for different specimens of the same material.

2—For both Procedure A and Procedure B, the weight loss during curing is (S)−[(C)−(A)] and the weight loss during baking is (C)−(D).

E.3.3 One-Time Deadlines Relating to Surface Coating of Plastic Parts and Products NESHAP [40 CFR Part 63, Subpart PPPP]

The Permittee shall comply with the following requirements by the dates listed:

Requirement	Rule Cite	Deadline
Submit Initial Notification	63.4510(b)	within 120 days from start-up
Compliance Date	63.4483(a)	upon start-up
Conduct Initial Compliance Demonstrations	63.4540, 63.4550, 63.4560(a)(3)	The initial compliance demonstration must be completed for the initial compliance period, which begins on the day after the compliance date and ends on the last day of the twelfth full month after the compliance date.
Submit Notification of Intent to Conduct a Performance Test	63.7(b) and 63.9(e)	within 60 days before the performance test is scheduled to begin
Conduct Performance Test	63.4560(a)(1)	no later than 180 days after the compliance date
Results of Initial Performance Tests	63.4520(b)	within 60 days after completing the performance test
Notification of Compliance Status	63.4510(c)	no later than 30 days following the end of the initial compliance period
First Semiannual Compliance Report	63.4520(a)(1)	The first January 31 or July 31, after the end of the initial compliance period.

SECTION E.4 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

(B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID 1100.

(C) One (1) E-Coat pre-heat zone, with a maximum heat input capacity of 3.7 MMBtu/hr, exhausting to stack ID 1003.

(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of five oven zones, each with a heat input capacity of 3.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(E) One (1) cooling tunnel, exhausting to stack ID 1006.

(2) Sealer Deadener Coating Line, identified as PA-03, with a capacity of 73 units per hour, consisting of the following:

(A) One (1) automatic and manual sealer deadener application area and one (1) sound deadener booth, using airless spray application system, exhausting to stack ID 1007.

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(A) One (1) Primer/Surfacer spray coating booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system and dry filters to control particulate overspray, exhausting to stack ID 1014 and stack ID 1015.

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, one with a maximum heat input capacity of 3.5 MMBtu/hr and one with a maximum heat input capacity of 2.6 MMBtu/hr.

(C) One (1) natural gas-fired Primer/Surfacer 5-stage oven tunnel, which consists of five (5) zones, oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(D) One (1) oven exit hood exhaust, exhausting to stack ID 1021.

(E) One (1) cooling tunnel, exhausting to stack ID 1022.

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(Continued on next page)

(A) Two (2) basecoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash systems and dry filters to control particulate overspray, exhausting to stack ID 1032 and stack ID 1043.

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of 2.6 MMBtu/hr, exhausting to stack ID 1033 and stack 1044.

(C) Two (2) clearcoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems. The automatic zones use water wash systems to control particulate overspray and the manual zones use dry filters. The manual zones are cascaded to the automatic zones, and the automatic zones are controlled by one (1) RTO, identified as RTO #2 with stack ID 1101.

(D) One (1) natural gas-fired Topcoat 5-stage oven tunnel, which consists of five (5) zones, oven zone #1 with a heat input capacity of 3.5 MMBtu/hr, oven zone #2 with a heat input capacity of 2.6 MMBtu/hr and oven zones #3, #4 and #5, each with a heat input capacity of 1.7 MMBtu/hr, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(E) One (1) cooling tunnel, exhausting to stack ID 1041.

(F) One oven exit hood exhaust, exhausting to stack ID 1037.

(G) Topcoat on-line repair, identified as PA-07 which includes:

(i) One (1) repair sanding booth, identified as PA-08 controlled by dust filters, exhausting to stack ID 1056.
(ii) One (1) repair coating booth using water wash system to control particulate overspray, exhausting to stack ID 1057.
(iii) One(1) natural gas-fired repair oven, with a maximum heat input capacity of 2.6 MMBtu/hr, exhausting to stack ID 1058.
(iv) One (1) Cooling tunnel, exhausting to stack ID 1060.
(v) One (1) small repair booth, exhausting to stack ID 1055, with infrared curing, consists of three (3) banks and portable infrared lights.

This topcoat on-line repair booth is used before the vehicles are not completely assembled; therefore, under 40 CFR 63, Subpart MMMM, this is considered a new in-line repair operation.

(5) Blackout/Cavity wax coating booth, identified as PA-11, equipped with dry filters, exhausting to stack ID 1062. Under 40 CFR 63, Subpart MMMM, the application of blackout material is considered a new coating operating. The wax is not applied as a temporary material, therefore, the application of the wax is considered a new coating operation.

(6) Miscellaneous cleaning and purge operation – paint operations, consisting of the purge and clean-up solvent usage and recovery system, identified as PA-14, including virgin solvent distribution, day tanks, small portable containers including containers that meet the definition of cold cleaners, and spent solvent recovery.

(Continued on next page)

(Continued from prior page)

(7) Paint effluent system, identified as PA-17, consisting of sludge for separation of paint solids from booth water/oil emulsion wash systems for body and plastic parts painting. Solids are chemically separated and sent off-site. Water/oil emulsion is recycled to paint booths or sent to wastewater treatment. Under 40 CFR 63, Subpart MMMM this is considered waste materials generated by a coating operation; therefore PA-17, is a new affected source.

(c) Final Assembly Operations:

(1) Assembly window install and miscellaneous operations, identified as AF-01, with a capacity of 70 units per hour, consisting of all coatings, sealers, lubricants and related cleaning solvents used for auto assembly, including processes used to install window glass in vehicles, including body primer, glass cleaner, glass primer, and glass adhesive. Includes robotic and manual application equipment, coating delivery/circulation systems and raw material storage containers. Under 40 CFR 63, Subpart MMMM, this is considered a new affected source.

Insignificant Activities:

(a) Painting Operations:

(3) Topcoat in-line repair, which includes repair area for small interior topcoat, imperfections, manual application equipment, identified as PA-09. Under 40 CFR 63, Subpart MMMM, this is considered a new in-line repair operation.

(7) Final repair, identified as PA-12, which includes repair coating booths and general areas, using manual application systems, and IR curing equipment. Under 40 CFR 63, Subpart MMMM, this is considered a new final repair operation.

(8) Final repair, identified as PA-13, using air dry materials and manual application system. Under 40 CFR 63, Subpart MMMM, this is considered a new final repair operation.

(9) Paint Mix Rooms (Emissions accounted for in the emission determinations at each respective source). All storage containers and mixing vessels associated with affected source are subject to the requirements of 40 CFR 63, Subpart MMMM.

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

E.4.1 General Provisions Relating to NESHAP IIII [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.3101, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in Table 2 of 40 CFR Part 63, Subpart IIII in accordance with schedule in 40 CFR 63 Subpart IIII.

E.4.2 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:

E.4.3 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.

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 requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 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 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). 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.

(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.

§ 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 NESHAP for surface coating of miscellaneous metal parts and products (subpart MMMM of this part) or surface coating of plastic parts and products (subpart PPPP of this part) which apply coatings to parts intended for use in new automobiles or new light-duty trucks or as aftermarket repair or replacement parts for automobiles or light-duty trucks.

(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 you commenced its construction after December 24, 2002, and the construction is of a completely new automobile and light-duty truck assembly plant where previously no automobile and light-duty truck assembly plant had existed, a completely new automobile and light-duty truck paint shop where previously no automobile and light-duty truck paint shop had existed, or a new automobile and light-duty truck topcoat operation where previously no automobile and light-duty truck topcoat operation had existed.

(f) Intentionally omitted.

(g) Intentionally omitted.

§ 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) Intentionally omitted.

(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) Intentionally omitted.

(c) Intentionally omitted.

(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 Intentionally omitted.

§ 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.

§ 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) Initial notification. 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).

(c) Intentionally omitted.

§ 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) Records pertaining to the design and operation of control and monitoring systems must be maintained on-site for the life of the equipment in a location readily available to plant operators and inspectors.

§ 63.3131 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.

(b) Except as provided in §63.3130(o), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, as specified in §63.10(b)(1).

(c) Except as provided in §63.3130(o), you must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You may keep the records off site for the remaining 3 years.

Compliance Requirements for Adhesive, Sealer, and Deadener

§ 63.3150 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3151. The initial compliance period begins on the applicable compliance date specified in §63.3083 and ends on the last day of the month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next month. You must determine the mass average organic HAP content of the materials used each month for each group of materials for which an emission limitation is established in §63.3090(c) and (d) or §63.3091(c) and (d). The initial compliance demonstration includes the calculations according to §63.3151 and supporting documentation showing that during the initial compliance period, the mass average organic HAP content for each group of materials was equal to or less than the applicable emission limits in §63.3090(c) and (d) or §63.3091(c) and (d).

§ 63.3151 How do I demonstrate initial compliance with the emission limitations?

You must separately calculate the mass average organic HAP content of the materials used during the initial compliance period for each group of materials for which an emission limit is established in §63.3090(c) and (d) or §63.3091(c) and (d). If every individual material used within a group of materials meets the emission limit for that group of materials, you may demonstrate compliance with that emission limit by documenting the name and the organic HAP content of each material used during the initial compliance period. If any individual material used within a group of materials exceeds the emission limit for that group of materials, you must determine the mass average organic HAP content according to the procedures of paragraph (d) of this section.

(a) Determine *the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each material used during the compliance period by using one of the options in paragraphs (a)(1) through (5) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test.

(i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for OSHA-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4), and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (*e.g.,* 0.3791).

(ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (*e.g.,* 0.7638 truncates to 0.763).

(2) Method 24 (appendix A to 40 CFR part 60). For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP.

(3) Alternative method. You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(4) Information from the supplier or manufacturer of the material. You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4), and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence, unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(5) Solvent blends. Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When neither test data nor manufacturer's data for solvent blends are available, you may use the default values for the mass fraction of organic HAP in the solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries, and you may only use Table 4 if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you only know whether the blend is aliphatic or aromatic. However, if the results of a Method 311 test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence, unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the data from Table 3 or 4 are correct.

(b) Determine the density of each material used. Determine the density of each material used during the compliance period from test results using ASTM Method D1475–98 (Reapproved 2003), “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), or for powder coatings, test method A or test method B of ASTM Method D5965–02, “Standard Test Methods for Specific Gravity of Coating Powders,” (incorporated by reference, see §63.14), or information from the supplier or manufacturer of the material. If there is disagreement between ASTM Method D1475–98 (Reapproved 2003) test results or ASTM Method D5965–02, test method A or test method B test results and the supplier's or manufacturer's information, the test results will take precedence unless after consultation, the facility demonstrates to the satisfaction of the enforcement authority that the facility's data are correct.

(c) *Determine the volume of each material used.* Determine the volume (liters) of each material used during each month by measurement or usage records.

(d) *Determine the mass average organic HAP content for each group of materials.* Determine the mass average organic HAP content of the materials used during the initial compliance period for each group of materials for which an emission limit is established in §63.3090(c) and (d) or §63.3091(c) and (d), using Equations 1 and 2 of this section.

(1) Calculate the mass average organic HAP content of adhesive and sealer materials other than components of the glass bonding system used in the initial compliance period using Equation 1 of this section:

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

Where:

Cavg,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:

$$C_{avg,d} = \frac{\sum_{m=1}^{s} \left(Vol_{d,m}\right)\left(D_{d,m}\right)\left(W_{d,m}\right)}{\sum_{m=1}^{s} \left(Vol_{d,m}\right)\left(D_{d,m}\right)} \qquad (Eq.\ 2)$$

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) Intentionally omitted.

(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.

(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. 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.

(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:

HBC = 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.

Volc,i = Total volume of coating, i, used during the month, liters.

Dc,i = Density of coating, i, kg coating per liter coating.

Wc,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.

Volt,j = Total volume of thinner, j, used during the month, liters.

Dt,j = Density of thinner, j, kg per liter.

Wt,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:

HCn = 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.

AC = 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.

BC = 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.

Aunc = 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.

Bunc = 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:

AC = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg.

Volc,i = Total volume of coating, i, used during the month, liters.

Dc,i = Density of coating, i, kg per liter.

Wc,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.

$$B_c = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad (Eq.\ 2B)$$

Where:

BC = Total mass of organic HAP in the thinners used in the controlled coating operation during the month, kg.

Volt,j = Total volume of thinner, j, used during the month, liters.

Dt,j = Density of thinner, j, kg per liter.

Wt,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:

$$A_{unc} = \sum_{i=1}^{m} \left(VOLD_i\right)\left(D_i\right)\left(W_i\right) \qquad (Eq.\ 2C)$$

Where:

Aunc = 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.

VOLDi = Total volume of coating, i, used in the controlled coating operation during deviations, liters.

Di = Density of coating, i, kg per liter.

Wi = 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:

$$B_{unc} = \sum_{j=1}^{n} \left(VOLD_j\right)\left(D_j\right)\left(W_j\right) \qquad (Eq.\ 2D)$$

Where:

Bunc = 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.

VOLDj = Total volume of thinner, j, used in the controlled coating operation during deviations, liters.

Dj = Density of thinner, j, kg per liter.

Wh = 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:

RV = Volatile organic matter collection and recovery efficiency of the solvent recovery system during the month, percent.

MVR = Mass of volatile organic matter recovered by the solvent recovery system during the month, kg.

Voli = Volume of coating, i, used in the coating operation controlled by the solvent recovery system during the month, liters.

Di = Density of coating, i, kg per liter.

WVc,i = Mass fraction of volatile organic matter for coating, i, kg volatile organic matter per kg coating.

Volj = Volume of thinner, j, used in the coating operation controlled by the solvent recovery system during the month, liters.

Dj = Density of thinner, j, kg per liter.

WVt,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:

HCSR = 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.

ACSR = 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.

BCSR = 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.

RV = 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:

ACSR = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system during the month, kg.

Volc,i = Total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters.

Dc,i = Density of coating, i, kg per liter.

Wc,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:

BCSR = Total mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system during the month, kg.

Volt,j = Total volume of thinner, j, used during the month in the coating operation controlled by the solvent recovery system, liters.

Dt,j = Density of thinner, j, kg per liter.

Wt,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:

$$V_{sdep} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(V_{s,i}\right)\left(TE_{c,i}\right)/100 \qquad (Eq.\ 5)$$

Where:

Vsdep = Total volume of coating solids deposited during the month, liters.

Volc,i = Total volume of coating, i, used during the month, liters.

Vs,i = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3161(f).

TEc,i = Transfer efficiency of coating, i, determined according to §63.3161(g), expressed as a decimal, for example 60 percent must be expressed as 0.60.

m = Number of coatings used during the month.

(m) Calculate *the mass of organic HAP emissions for each month.* Determine the mass of organic HAP emissions, kg, during each month, using Equation 6 of this section.

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

Where:

HHAP = Total mass of organic HAP emissions for the month, kg.

HBC = 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.

HCn,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.

HCSR,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.

HDEV,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.

Sk = 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:

Hrate = Organic HAP emission rate for the month compliance period, kg organic HAP per liter coating solids deposited.

HHAP = Mass of organic HAP emissions for the month, kg, determined according to Equation 6 of this section.

Vsdep = 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:

HDEV = Mass of organic HAP emission reduction achieved during a period of deviation for the controlled coating operation, kg.

ADEV = 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.

BDEV = 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.

CEDEV = Capture efficiency of the emission capture system vented to the add-on control device, approved for the period of deviation, percent.

DREDEV = 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:

ADEV = Total mass of organic HAP in the coatings used in the controlled coating operation during the period of deviation, kg.

VOLCDEV,i = total volume of coating, i, used in the controlled coating operation during the period of deviation, liters.

Dc,i = Density of coating, i, kg per liter.

Wc,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:

$$BDEV = \sum_{j=1}^{n} \left(VOL_{TDEV,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad (Eq.\ 8B)$$

Where:

BDEV = Total mass of organic HAP in the thinners used in the controlled coating operation during the period of deviation, kg.

VOLTDEV,j = Total volume of thinner, j, used in the controlled coating operation during the period of deviation, liters.

Dt,j = Density of thinner, j, kg per liter.

Wt,j = Mass fraction of organic HAP in thinner, j, kg per kg.

n = Number of different thinners used.

§ 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.

(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.

§ 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:

TVHi = 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.

Voli = Total volume of coating or thinner, i, used in the coating operation during the capture efficiency test run, liters.

Di = 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.

TVHcaptured = 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.

TVHuncaptured = 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.)

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

Where:

CEi = 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.

Pi = 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.

Vsdep,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.

VOCi = 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:

Vsdep,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.

Vs,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).

TEc,i = Transfer efficiency of coating, i, or average transfer efficiency for the group of coatings including coating, i, in the spray booth(s) for the flash-off area or bake oven for which the panel test is conducted determined according to §63.3161(g), expressed as a decimal, for example 60 percent must be expressed as 0.60. (Transfer efficiency also may be determined by testing representative coatings. The same coating groupings may be appropriate for both transfer efficiency testing and panel testing. In this case, all of the coatings in a panel test grouping would have the same transfer efficiency.)

(2) Calculate the mass of VOC per volume of coating for coating, i, or the composite mass of VOC per volume of coating for the group of coatings including coating, i, used during the month in the spray booth(s) preceding the flash-off area or bake oven for which the panel test is conducted, kg, using Equation 6 of this section:

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

Where:

VOCi = 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.

Dc,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).

Wvocc,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 “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 volume of coating solids deposited must be converted to percent capture efficiency using Equation 7 of this section:

$$CE_i = \left(P_{m,i}\right)\left(W_{sdep,i}\right)/\left(Wvoc_{c,i}\right) \qquad \text{(Eq. 7)}$$

Where:

CEi = 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.

Pm,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.

Wsdep,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.

Wvocc,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 “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:

Wsdep,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.

Ws,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).

TEc,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.

§ 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:

Mf = Total gaseous organic emissions mass flow rate, kg per hour (kg/h).

Cc = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, ppmv, dry basis.

Qsd = 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.

Mfi = 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.

Mfo = 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 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) Intentionally omitted.

(c) Intentionally omitted.

(d) Intentionally omitted.

(e) Intentionally omitted.

(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.

§ 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) Intentionally omitted.

(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) Intentionally omitted.

(e) Intentionally omitted.

(f) Intentionally omitted.

(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.

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) Intentionally omitted.

§ 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.

(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.

§ 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).

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. It is applied on selected vehicle surfaces that are exposed to impingement by stones and other road debris. It is typically applied after the electrodeposition primer and before the topcoat Anti-chip coatings are 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/or light-duty truck assembly plant means facilities involved primarily in assembly of automobiles and 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.

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.

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 an emission capture system and add-on control device.

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 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 coatings applied 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 topcoat.

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.

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.

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.

Primer-surfacer means an intermediate protective coating applied on the electrodeposition primer and under the topcoat. It provides adhesion, protection, and appearance properties to the total finish. Also called a guide coat or surfacer. Anti-chip coatings are 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 vestibule to or exit vestibule from a spray booth which isolates the spray booth from the area immediately preceeding (for an entry vestibule) or immediately following (for an 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 preceeding 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 glass or metal bottle of less than 0.10 liter volume furnished with a brush that is permanently attached to the bottle closure.

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.

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.

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. Intentionally omitted.		
3. Intentionally omitted.		
4. Intentionally omitted.		
5. Intentionally omitted.		

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]

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 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).	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.

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.

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]

§ 63.1(c)(1)	Applicability After Standard Established.	Yes.	
§ 63.1(c)(2)................	Applicability of Permit Program for Area Sources.	No	Area sources are not subject to subpart IIII
§ 63.1(c)(5)................	Extensions and Notifications.	Yes.	
§ 63.1(e)....................	Applicability of Permit Program Before Relevant Standard is Set.	Yes.	
§ 63.2	Definitions	Yes.	Additional definitions are specified in § 63.3176.
§ 63.3(a)-(c)..............	Units and Abbreviations.	Yes.	
§ 63.4(a)(1)-(5)..........	Prohibited Activities	Yes.	
§ 63.4(b)-(c)..............	Circumvention/ Fragmentation.	Yes.	
§ 63.5(a)....................	Preconstruction Review Applicability.	Yes.	
§ 63.5(b)(1)-(6)..........	Requirements for Existing, Newly Constructed, and Reconstructed Sources.	Yes.	
§ 63.5(d)....................	Application for Approval of Construction/Reconstruction.	Yes.	
§ 63.5(e)....................	Approval of Construction/Reconstruction.	Yes.	
§ 63.5(f).....................	Approval of Construction/Reconstruction Based on Prior State Review.	Yes.	

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]

§ 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.	

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]

§ 63.7(a)(1)................	Performance Test Requirements_Applicability.	Yes.	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.3164 and 63.3166.
§ 63.7(a)(2)................	Performance Test Requirements_Dates.	Yes.	Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standards. Section 63.3160 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3)................	Performance Tests Required By the Administrator.	Yes.	
§ 63.7(b)-(e)	Performance Test Requirements_Notification, Quality Assurance, Facilities Necessary for Safe Testing Conditions During Test.	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to 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.

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]

§ 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.

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]

§ 63.8(c)(6)................	CMS Requirements	No	Section 63.3168 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply with the standards.
§ 63.8(c)(7)................	CMS Out-of-Control Periods.	No.	
§ 63.8(c)(8)................	CMS Out-of-Control Periods Reporting.	No	Section 63.3120 requires reporting of CMS out-of-control periods.
§ 63.8(d)-(e)	Quality Control Program and CMS Performance Evaluation.	No.	Subpart IIII does not require the use of continuous emissions monitoring systems.
§ 63.8(f)(1)-(5)...........	Use of an Alternative Monitoring Method.	Yes.	
§ 63.8(f)(6).................	Alternative to Relative Accuracy Test.	No.	Subpart IIII does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)-(5)..........	Data Reduction.	No.	Sections 63.3167 and 63.3168 specify monitoring data reduction.
§ 63.9(a)-(d)	Notification Requirements.	Yes.	
§ 63.9(e)....................	Notification of Performance Test.	Yes.	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standards.
§ 63.9(f).....................	Notification of Visible Emissions/Opacity Test.	No	Subpart IIII does not have opacity or visible emission standards.

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]

§ 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 notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines.	Yes.	
§ 63.9(j)	Change in Previous Information.	Yes.	
§ 63.10(a).	Recordkeeping/Reporting_Applicability and General Information.	Yes.	
§ 63.10(b)(1).............	General Recordkeeping Requirements.	Yes.	Additional requirements are specified in §§ 63.3130 and 63.3131.
§ 63.10(b)(2)(i)-(v).	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS.	Yes	Requirements for startup, shutdown, and malfunction records only apply to capture systems and add-on control devices used to comply with the standards.
§ 63.10(b)(2)(vi)-(xi) ..		Yes.	
§ 63.10(b)(2)(xii).	Records	Yes.	
§ 63.10(b)(2)(xiii)		No	Subpart IIII does not require the use of continuous emissions monitoring systems.
§ 63.10(b)(2)(xiv)		Yes.	
§ 63.10(b)(3).............	Recordkeeping Requirements for Applicability Determinations.	Yes.	

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]

§ 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.	

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]

§ 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.

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
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.

$$P_{m,i} = \left(W_{rem,i}\right)/\left(W_{sdep,i}\right) \qquad (Eq.\ \text{A-3})$$

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.

4.4 One-Time Deadlines Relating to Automobiles and Light-Duty Surface Coating Requirements [40 CFR Part 63, Subpart IIII]

The Permittee shall comply with the following requirements by the dates listed:

Requirement	Rule Cite	Deadline
Submit Initial Notification	63.3110(b)	within 120 days from start-up

Requirement	Rule Cite	Deadline
Compliance Date	63.3083(a)	upon start-up
Conduct Initial Compliance Demonstrations	63.3150, 63.3160(a), and 63.3170(a)	The initial compliance demonstration must be completed for the initial compliance period, which begins on the day after the compliance date and ends on the last day of the twelfth full month after the compliance date.
Submit Notification of Intent to Conduct a Performance Test	63.7(b) and 63.9(e)	within 60 days before the performance test is scheduled to begin
Conduct Performance Test	63.3160(a)(1) and 63.3170(a)(1)	no later than 180 days after the compliance date
Results of Initial Performance Tests	63.3120(b)	within 60 days after completing the performance test
Notification of Compliance Status	63.3110(c)	no later than 30 days following the end of the initial compliance period
First Semiannual Compliance Report	63.3120(a)(1)	The first January 31 or July 31, after the end of the initial compliance period.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, Indiana 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, Ohio, 43040
PSD/Part 70 Permit No.:031-23360-00026

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 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: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, OH 43040
PSD/Part 70 Permit No.:031-23360-00026

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), within 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 within 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: ______________________

Date: ______________________

Phone: ______________________

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, Ohio 43040
PSD/Part 70 Permit No.: 031-23360-00026
Facility: Source-wide
Parameter: # vehicles produced
Limit: 250,000 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)
1			
2			
3			

Submitted by: ____

Title / Position: ____

Signature: ____

Date: ____

Phone: ____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, Ohio 43040
PSD/Part 70 Permit No.: 031-23360-00026
Facility: Gasoline Storage Tanks (FAC-99 and FAC -100)
Parameter: Gasoline throughput
Limit: Gasoline throughput be limited to 2,250,000 gallon per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: ___________ YEAR:________

Month	Total Gasoline Throughput This Month (gallons)	Total Gasoline for Past 11 Months (gallons)	Total Gasoline for 12 Month Period (gallons)
1			
2			
3			

Submitted by: ____

Title / Position: ____

Signature: ____

Date: ____

Phone: ____

Attach a signed certification to complete this report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, OH 43040
PSD/Part 70 Permit No.: 031-23360-00026
Facility: E-Coat Line (PA-02), Sealer/Deadener (PA-03), Primer/Surfacer (PA-05), Topcoat Coating Line and On-Line Repair (PA-07), Blackout/Cavity Wax Coating Line (PA-11), and Plastic Parts,
Parameter: VOC
Limit: Shall not exceed 330.2 tons VOC per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: ___________YEAR_____________

Month	VOC Emissions This Month (tons)	VOC Emissions for Past 11 Months (tons)	VOC Emissions for 12 Month Period (tons)
Month 1			
Month 2			
Month 3			

Submitted by: ____

Title / Position: ____

Signature: ____

Date: ____

Phone: ____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, Ohio 43040
PSD/Part 70 Permit No.: 031-23360-00026
Facility: Natural gas combustion sources in SECTION D.10
Parameter: VOC
Limit: 188.5 pounds of CO per MMCF of natural gas and
1,030 million cubic feet (1,000,000 decatherms) of natural gas 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)	Natural Gas Usage for 12 Month Period (MMCF)
1			
2			
3			

Submitted by: ____

Title / Position:____

Signature: ____

Date: ____

Phone:____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, OH 43040
PSD/Part 70 Permit No.:031-23360-00026
Facility: E-Coat tank, rinse and oven (PA-02), Primer/Surfacer (PA-05), Topcoat coating line and Topcoat on-line repair (PA-07),
Parameter: VOC
Limits: E-Coat tank, rinse, and oven (PA-02) - 0.04 pound per gallon of applied coating solids (lb/gacs
Primer/Surfacer (PA-05) – 4.1 lb/gacs
Topcoat Coating Line and Topcoat On-Line Repair (PA-07) – 5.2 lb/gacs
The VOC limits shall be based on a daily-volume- weighted average of the coatings applied, actual transfer efficiencies, and RTOs for control.

Quarter: _________Year ___________

Day	E-Coat tank, rinse, and oven (PA-02) (lb/gacs)	Primer/Surfacer (PA-05) (lb/gacs)	Topcoat Coating Line and Topcoat On-Line Repair (PA-07) (lb/gacs)	Day	E-Coat tank, rinse, and oven (PA-02) (lb/gacs)	Primer Surfacer (PA-05) (lb/gacs)	Topcoat Coating Line and Topcoat On-Line Repair (PA-07) (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							

Submitted by: ________________________Signature:_______________________

Title/Position: ________________________Date: : _______________________

Attach a signed certification to complete this report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, OH 43040
PSD/Part 70 Permit No.: 031-23360-00026
Facility: Sealer/Deadener (PA-03)
Parameter: VOC
Limits: Sealer/Deadener - 0.30 lb/gallon controlled by RTO
Cavity Wax - 1.2 lb/gallon (uncontrolled)

The VOC limits shall be based on a monthly-volume- weighted average of the coating used with RTO control on the Sealer/Deadener, and uncontrolled on the Cavity Wax.

Quarter: ________Year ___________ Page 1 of 2

Month	Sealer/ Deadener Average This Month (lb/gal)	Sealer/ Deadener Average for Past 11 Months (lb/gal)	Sealer/ Deadener Total Average for 12 Month Period (lb/gal)	Cavity Wax Average This Month (lb/gal)	Cavity Wax Average for Past 11 Months (lb/gal)	Cavity Wax Total Average for 12 Month Period (lb/gal)
1						
2						
3						

Submitted by:____________________ Date: ________________________
Title / Position:____________________ Phone: ________________________
Signature:________________________

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: **2755** N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, OH, 43040
PSD/Part 70 Permit No.:031-23360-00026
Facility: Plastic Parts Coating Line, identified as PO-02, Instrument Panel, identified as PO-03, Blackout coating - 0.74lb/gallon (uncontrolled)

Parameter: VOC
Limit: Primer coating shall not exceed 0.90 pounds per gallon of coating as applied.
Basecoat coating shall not exceed 1.15 pounds per gallon of coating as applied.
Clearcoat coating shall not exceed 3.25 pounds per gallon of coating as applied.
Instrument Panel, identified as PO-03 shall not exceed 2.3 pounds per gallon less water of coating as applied.
Blackout coating, identified as PA-11 shall not exceed 0.74 lb/gallon as applied

These limits shall be based on a daily volume weighted average of the coatings applied and RTOs for control.

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QUARTER ___________ YEAR ___________

Day	Primer Coating (lb/gal)	Basecoat Coating (lb/gal)	Clearcoat Coating (lb/gal)	Instrument Panel (lb/gal - water)	Black out (lb/gal)	Day	Primer Coating (lb/gal)	Basecoat Coating (lb/gal)	Clearcoat Coating (lb/gal)	Instrument Panel (lb/gal - water)	Black out (lb/gal)
1						17					
2						18					
3						19					
4						20					
5						21					
6						22					
7						23					
8						24					
9						25					
10						26					
11						27					
12						28					
13						29					
14						30					
15						31					
16											

Submitted by:____________________ Date: ________________________
Title / Position:____________________ Phone: ________________________
Signature:________________________Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, OH 43040
PSD/Part 70 Permit No.: 031-23360-00026
Facility: Final Repair-Air Dry, identified as PA-13, Topcoat In-Line Repair, identified as PA-09, Final Repair, identified as PA-12
Parameter: VOC
Limits: Final Repair-Air Dry, identified as PA-13 - less than 15 pounds per day (lbs/day).
Topcoat In-Line Repair, identified as PA-09 - less than 15 lbs/day.
Final Repair, identified as PA-12 – 4.8 lb/gallon. This lb/gal limit shall be based on a daily-volume weighted average of the coatings applied.

Month __________ Year _____

Day	Final Repair (PA-12) Average VOC Applied (lb/gal)	Final Repair (PA-13) VOC Input Usage (lb/day)	Topcoat In-Line Repair, identified as PA-09 VOC Input Usage (lb/day)	Day	Final Repair, identified as PA-12 VOC of Coatings Applied (lb/gal)	Final Repair (PA-13) VOC Input Usage (lb/day)	Topcoat In-Line Repair, identified as PA-09 VOC Input Usage (lb/day)
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							

Submitted by: ________________________ Signature: ________________________
Title/Position: ________________________ Date: : ________________________

Attach a signed certification to complete this report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, OH 43040
PSD/Part 70 Permit No.: 031-23360-00026
Facility: Miscellaneous Operations: Weld Sealer, Assembly Window Install, Wiping/Cleaning and Purge Solvent from Plastic Operation, Wiping/Cleaning and Purge Solvent from Body Painting Operation
Parameter: VOC
Limits: Weld Sealer – 0.30 lb/gallon
Assembly Window Install – 0.40 lb/gallon
The VOC limits shall be based on a monthly-volume- weighted average of the coatings applied.

Quarter: ________Year ___________ Page 1 of 2

Month	Weld Sealer Average VOC of Coatings Applied This Month (lb/gal)	Weld Sealer Average VOC of Coatings Applied for Past 11 Months (lb/gal)	Weld Sealer Average VOC of Coatings Applied for 12 Month Period (lb/gal)	Assembly Window Install Average VOC of Coatings Applied This Month (lb/gal)	Assembly Window Install Average VOC of Coatings Applied for Past 11 Months (lb/gal)	Assembly Window Install Average VOC of Coatings Applied for 12 Months (lb/gal)
1						
2						
3						

Additional Limits: Miscellaneous Operations: Total limit of 134.9 tons per twelve consecutive month period with compliance determined at the end of each month.

Facility/Operation	VOC Limits (tons/year)
Weld Sealer	3.91
Assembly Window Install	24.78
Wiping/Cleaning and Purge Solvent from Body Paint Operation	67.09
Wiping/Cleaning and Purge Solvent from Plastic Operation	39.12
TOTAL LIMIT	134.9

Month	Weld Sealer VOC Usage (tons)	Assembly Window Install VOC Usage (tons)	Wiping/ Cleaning and Purge Solvent from Plastic Operatio n VOC Usage (tons)	Wiping/ Cleaning and Purge Solvent from Body Painting Operation VOC Usage (tons)	**TOTAL VOC USAGE (TONS)**	Weld Sealer VOC Usage (tons)	Window Install VOC Usage (tons)	Wiping/ Cleaning and Purge Solvent from Plastic Operation VOC Usage (tons)	Wiping/ Cleaning and Purge Solvent from Body Painting Operation VOC Usage (tons	**TOTAL VOC USAGE (TONS**	Weld Sealer VOC Usage (tons)	Window Install VOC Usage (tons)	Wiping/ Cleaning and Purge Solvent from Plastic Operation VOC Usage (tons)	Wiping/ Cleaning and Purge Solvent from Body Painting Operation VOC Usage (tons)	**TOTAL VOC USAGE (TONS)**
	This Month	This Month	This Month	This Month	This Month	Previous 11 Months	Previous 11 Months	Previous 11 Months	Previous 11 Months	Previous 11 Months	12 Months Total	12 Months Total	12 Months Total	12 Months Total	12 Months Total
1															
2															
3															

Submitted by: ______________________ Signature:_____________________

Submitted by: ______________________ Signature:_____________________

Title/Position: ______________________ Date: : _____________________

Attach a signed certification to complete this report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: 2755 N. Michigan Avenue, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, OH 43040
PSD/Part 70 Permit No.:031-23360-00026

Months: ___________ to ____________ Year: ______________

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. 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:	

Page 2 of 2

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:____

Attach a signed certification to complete this report

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Prevention of Significant Deterioration/Part 70 Significant Source Modification and a Significant Permit Modification

Source Name:	Honda Manufacturing of Indiana, LLC
Source Location:	2755 N. Michigan Ave., Greensburg, IN 47240
County:	Decatur
SIC Code:	3711, 3714
Operating Permit No.:	031-23360-00026
Operating Permit Issuance Date:	October 19, 2006
Significant Permit Modification No.:	031-24706-00026
Significant Source Modification No.:	031-24760-00026
Permit Reviewer:	Jamal Naas

On August 7, 2007, the Office of Air Quality (OAQ) had a notice published in the Greensburg Daily News, Greensburg, Indiana, stating that Honda Manufacturing of Indiana, LLC had applied for a significant source modification and a significant permit modification for PSD/ Part 70 Operating Permit. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit 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 this permit should be issued as proposed.

On August 24, 2007, Mr. George Walker, a resident of Greensburg, Indiana, submitted a comment on the proposed permit. The comment summary and corresponding response are as follows (bolded language has been added and the language with a line through it has been deleted):

Comment 1:

Mr. Walker expressed concern about air quality due to this modification.

Response to Comment 1:

Honda Manufacturing of Indiana is required to install air pollution control equipment such as thermal oxidizers to ensure compliance with federal and state regulations. Best Available Control Technology (BACT) analysis and air modeling analysis were conducted to ensure compliance with federal and state regulations. The permit conditions included monitoring and stack testing requirements to ensure compliance at all times.

No change has been made to the permit.

On August 24, 2007, Honda Manufacturing of Indiana submitted comments on the proposed permit. The comments and corresponding responses are as follows (bolded language has been added and the language with a line through it has been deleted):

Comment 1:

Page 11, (2)(A) - request to change the wording to call out cold cleaners for Plastics Department same as Paint Department similar source wording.

Change to: "Purge and clean-up solvent usage and recovery system, identified as PO-05, including virgin solvent distribution, day tanks, small portable containers including containers that meet the definition of cold cleaners, and spent solvent recovery."

Response to Comment 1:

IDEM, OAQ agrees with the commenter to use similar wording for the Plastics Operations with regard to cold cleaners. The following permit condition has been revised:

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:

(b) Plastics Operations:

(2) Miscellaneous cleaning and purge operation – plastics painting, consisting of the following:

(A) Purge and clean-up solvent usage and recovery system, identified as PO-05, including virgin solvent distribution, day tanks, **small** portable containers **including containers that meet the definition of cold cleaners**, and spent solvent recovery.

Comment 2:

Page 65, D.5.4 - request to change the wording to: "The basecoat booth (when using solvent-borne basecoat), the clearcoat booth and the oven exhausts from the Plastic Parts Coating Line ID PO-02 shall be vented to regenerative thermal oxidizer (RTO#3 with stack ID 2029) at all times when the line is in operation."

The reason for this change request is that the current wording could be interpreted as requiring control of primer and basecoat booths at all times which is not the intention.

Response to Comment 2:

IDEM, OAQ agrees with the commenter to revise the current wording of condition D.5.4 for clarity purposes. The following permit condition has been revised:

D.5.4 Regenerative Thermal Oxidizer (RTO) [326 IAC 2-2]

The basecoat booth (when using solvent-borne basecoat), the clearcoat booth and the oven exhausts from the Plastic Parts Coating Line ID PO-02~~, consists of primer, basecoat, clearcoat and oven~~ shall be vented to regenerative thermal oxidizer (RTO#3 with stack ID 2029) at all times when the line is in operation.

Comment 3:

Page 77, D.7.8(a)(1) - request that IDEM remove the term "flow meters" to allow HMIN the flexibility to monitor virgin purge usage and spent purge collection using alternative methods. We intend to utilize flow meters on the virgin side, but would prefer to monitor spent purge generation based on collection and shipping records, if possible.

Response to Comment 3:

IDEM, OAQ agrees with the commenter to use an alternative method to monitor the volume of the purge materials collected for recycling or disposal. The following permit condition has been revised:

D.7.8 Volatile Organic Compounds (VOC) [326 IAC 8-1-2(a)(7)]

(a) Compliance with the VOC limits for the solvent purging operation in Condition 7.1(a) and (b) shall be determined through the following:

(1) Purge solvent usage and collection shall be monitored separately for the Plastic operations and Body Painting operations. For each of the Plastic operations and Body Painting coating systems, the Permittee shall install flow meters to monitor the volume of purge solvent delivered to the spray applicators, and **shall use collection and shipping records to monitor** 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:

$$\text{Purge Solvent Collection/Capture Efficiency} = \frac{Sr * VOCr}{Pu * VOCv}$$

Where:
Sr = Purge material shipped for recovery (gallons)
Pu = Purge solvent usage (gallons)
VOCv = VOC content virgin purge (lb/gal)
VOCr = VOC content in purge materials shipped for recovery (lb/gal)

Comment 4:

Page 88 - Add PA-07 Topcoat oven zones 3, 4, and 5 to line 3 of the table under D10.2(b). I believe this was accidently left out.

Response to Comment 4:

IDEM, OAQ agrees with the commenter that the emission unit was inadvertently left out. The following permit condition has been revised:

D.10.2 Prevention of Significant Deterioration (PSD) – Best Available Control Technology for Particulate Emissions (PM) and Nitrogen Oxides (NOx) [326 IAC 2-2]

(b) Pursuant to 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the Natural Gas Combustion (small heaters < 15 MMBtu/hr maximum heat input capacity), shall be as follows:

Emission Unit IDs	Emission Limitation (lb/MMBTU)	
	NOx	PM

Emission Unit IDs	Emission Limitation (lb/MMBTU)	
	NOx	PM
FAC-01 through FAC-07, FAC-11 through FAC-19, FAC-35, FAC-116, PA-05 air supply house, PA-06 air supply house, PA-07 air supply house, PA-21 through PA-26, PO-02 air supply house	0.08 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only
FAC-20, FAC-26, FAC-28, FAC-29, FAC-32, FAC-37, FAC-41, FAC-43 through FAC-52, FAC-140, FAC-146, FAC-147, PA-20	0.04 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only
FAC-27, FAC-30, PA-02 bake oven, PA-05 bake oven zones 3, 4 & 5, PA-07 repair oven, PO-02 bake oven zone 2**, PA-07 zones 3, 4 & 5**	0.02 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only
PA-05 flash off heaters 1 and 2, PA - 05 bake oven zones 1 and 2, PA-07 basecoat flash off heaters 1 and 2, PA-07 topcoat bake oven zones 1 and 2, PO-02 bake oven zone 1	0.048 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only
FAC-36, FAC-39, FAC-40, FAC-53 through FAC-80, FAC-110, FAC-117 through FAC-139, FAC-148 through FAC-170, 3 regenerative thermal oxidizers	0.10 lb NOX/MMBtu	0.0075 lb PM/MMBtu Natural gas only

Comment 5:

Page 89 - Change the wording for RTO NOx testing in D.10.4 as follows:

"The NOx testing for the RTOs shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration until each RTO has been tested one time." Delete the remaining sentence.

Response to Comment 5:

IDEM, OAQ believes that the facility should conduct NOx stack testing periodically as indicated in the existing D.10.4 condition.

No change has been made to the permit.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Prevention of Significant Deterioration/Part 70 Significant Source Modification and a Significant Permit Modification

Source Description and Location

Source Name:	**Honda Manufacturing of Indiana, LLC**
Source Location:	**2755 N. Michigan Ave., Greensburg, IN 47240**
County:	**Decatur**
SIC Code:	**3711, 3714**
PSD/Part 70 Permit No.:	**031-23360-00026**
PSD/Part 70 Permit Issuance Date:	**October 19, 2006**
Significant Permit Modification No.:	**031-24706-00026**
Significant Source Modification No.:	**031-24760-00026**
Permit Reviewer:	**Jamal Naas**

County Attainment Status

The source is located in Decatur County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) 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. Decatur 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) Decatur County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

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

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, fugitive emissions are not counted toward the determination of PSD applicability.

Description of Proposed Project

The Office of Air Quality (OAQ) has reviewed an application, submitted by Honda Manufacturing of Indiana, LLC (HMIN) on May 4, 2007 relating to the modification of Prevention of Significant Deterioration/Part 70 Operating Permit No. 031-23360-00026 to add new emission units and make revisions to reflect changes to permitted emission units. The modification will require the re-opening of PSD-BACT.

(1) Replace two (2) ovens, for the topcoating process in the Main Body Painting area with a single, longer bake oven, identified as PA-07, reducing the maximum heat input capacity from 22 MMBtu/hr to 11.2 MMBtu/hr.

(2) Reduce the maximum heat input capacity for paint/plastics space heating burners, identified as PA-21, PA-22, PA-23, PA-24, PA-25, and PA-26 from 88.786 MMBtu/hr to 67 MMBtu/hr.

(3) Construct two (2) small, natural gas-fired manual plastics flame torches, identified as PO-14 and PO-19, to be used for treatment of cut edges of raw plastic molded parts prior to the painting process.

(4) Construct one (1) plastic pellets storage silo, identified as PO-18.

(5) Remove the immersion heater, identified as PO-13, with a maximum heating capacity of 5.3 MMBtu/hr, from the permit. The heater will not be installed.

(6) Construct two (2) new plastic regrind machines, identified as PO-15 and PO-16 to grind scrap painted and raw plastic parts into small parts for easier storage and shipment off-site for reclamation.

(7) Construct one (1) new plastic parts touch-up booth, identified as PO-17.

(8) Relocate the instrument panel coating line, identified as PO-03, to the main plastic parts coating line. The instrument panels will continue to be coated with a waterborne material in the primer booth of the main plastic parts coating line.

(9) Change paint process related burners, identified as PA-2, PA-03, PA-04, PA-05, PA-06, and PA-07, from indirect-fired burners to direct-fired burners to improve overall efficiency and reduce natural gas capacity.

(10) Add four natural gas HVAC units, identified as FAC-116, FAC-131, FAC-132 and FAC-140, with a combined heat input capacity of 2.2 MMBtu/hr.

(11) Remove six natural gas-fired HVAC units, identified as FAC-21, FAC-22, FAC-23, FAC-24, FAC-25 and FAC-87.

(12) Add seven cold cleaner degreasers, identified as MS-02, WE-07, AF-05, VQ-01, PA-27, PO-20 and FAC-176.

(13) Add one (1) portable welder, identified as WE-06, to be utilized for maintenance purposes.

(14) Add a robotic "SR station", identified as WE-02, where 4 MIG robots will weld together the main

body components of the vehicle. The bulk of the MIG welding will occur at the SR station and it will be controlled by the cartridge filter system. In addition, uncontrolled small MIG welding stations will be added in the "D" zone to perform approximately 10 - 20 small welds on component parts. Eight (8) uncontrolled back-up/repair manual MIG welding stations that will be used as back-up for the robotic stations, located within the Weld shop and repair areas.

(15) Remove the sealer bake oven from the Sealer/Deadener Coating Line, identified as PA-03. The curing emissions from the sealer application will be released in the Primer/Surfacer Coating Line bake oven which will be controlled by a regenerative thermal oxidizer. There will be no change to the emissions being controlled. Therefore, it will not impact the overall capture and control efficiency for sealer deadener emissions.

(16) Change the size, design, and number of space heating units, identified as FAC-117 through FAC-130, FAC-133 through FAC-139 and construct additional space heating units, identified as FAC-148 through FAC-169, for a total combined heat input capacity of 6.9 MMBtu/hr.

(17) Reduce the size of twenty eight (28) natural gas-fired space heaters, identified as FAC-53 through FAC-80, from a combined heat input capacity of 5.5 MMBtu/hr to 3.4 MMBtu/hr.

(18) Reduce the size of natural gas-fired HVAC units identified as FAC-01 through FAC-07, FAC-11 through FAC-20, FAC-26 through FAC-30, FAC32, FAC-35 through FAC-37, FAC-39 through FAC-41, FAC-43 through FAC-52, FAC-146, FAC-147 and FAC-170, from a combined heat input capacity of 122.3 MMBtu/hr to 87.5 MMBtu/hr.

(19) Increase the size of two (2) generators, identified as FAC-84 and FAC-85, and designate them as emergency generators.

(20) Reduce the size of two (2) generators, identified as FAC-82 and FAC-83, from 400 hp to 183 hp, each.

(21) Reduce the size of one (1) emergency generator, identified as FAC-86, from 250 kw to 100 kw.

(22) Add two (2) additional 81 kw emergency generators and increase the one (1) permitted 75 kw generator size to 81 kw. These units are identified as FAC-81, FAC-89, and FAC-115.

(23) Add two (2) additional 3.0 kw emergency generators, identified as FAC-145 and FAC-175.

(24) Increase the size of the pressurized refrigerant storage tank, identified as FAC-97, to 75,000 lbs. There will be no change in annual throughput.

(25) Reduce the size of the brake fluid tank, identified as FAC-98, from 4,000 gallons to 2,000 gallons.

(26) Reduce the size of the windshield washer fluid tank, identified as FAC-102, from 4,900 gallons to 2,000 gallons.

(27) Reduce the size of manual transmission fluid tank, identified as FAC-104, from 8,000 gallons to 2,000 gallons.

(28) Reduce the size of fuel oil tank, identified as MS-01 from 4,000 gallons to 3,000 gallons.

(29) Reduce the size of fuel oil tank, identified as FAC-90, from 3,000 gallons to 2,000 gallons.

(30) Reduce the size of two fuel oil tanks, identified as FAC-93 and FAC-94, from 500 gallons to 300 gallons.

(31) Reduce the size of auto transmission fluid tank, identified as FAC-96, from 15,000 gallons to

10,000 gallons.

(32) Reduce the size of power steering fluid tank, identified as FAC-101, from 8,000 gallons to 2,000 gallons.

(33) Reduce the size of anti-freeze tank, identified as FAC-103, from 15,000 gallons to 2,000 gallons.

(34) Remove one (1) permitted 2,370 gpm cooling tower, identified as FAC-106, from the permit. The cooling tower will not be installed.

(35) Replace one (1) permitted 877 gpm cooling tower, identified as FAC-10, with a 940 gpm cooling tower.

(36) Add two (2) new LPG aboveground pressurized storage tanks, identified as FAC-113 and FAC-114.

(37) HMIN requested a revision to the emission limit for CO emissions from the burners.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this 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 emissions 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, the department, or the appropriate local air pollution control agency." The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	362.1
PM10	362.1
SO_2	1.3
VOC	682.8
CO	307.4
NO_x	142.1
HAPs	60.4

This source modification is subject to 326 IAC 2-7-10.5 (f)(1) and (4) since it is subject to 326 IAC 2-2 (PSD) and emission levels are greater than the PTE thresholds for a minor source modification. Additionally, the modification will be incorporated into the PSD/Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12 (1), because this modification involves significant changes to permit conditions including emission limitations that are being modified to reflect the new emission units.

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this permit, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Pollutant	Emissions (tons/year)
PM	24.38
PM10	18.08
SO_2	0.41
VOC	500.65
CO	96.96
NO_x	55.78

This source modification has a potential to emit (PTE) volatile organic compounds (VOC) of 250 tons per year or greater, PM at 25 tons per year or greater, PM10 at 15 tons per year or greater, and NOx at 40 tons per year or greater. Therefore, the source under this modification is major and subject to Prevention of Significant Deterioration (PSD) review under 326 IAC 2-2 for VOC, PM10, and NOx pollutants. The complete BACT analysis is included in Appendix B of this document.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability Determination

(a) 326 IAC 2-2 (Prevention Significant Deterioration)

This proposed source is subject to 326 IAC 2-2, PSD, because VOC is emitted at a rate of 250 tons per year or greater, PM at a rate of 25 tons per year or greater, PM10 at a rate of 15 tons per year or greater, and NOx at a rate of 40 tons per year or greater.

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

See Appendix B for the PSD BACT analysis.

(c) 326 IAC 6-2 (Particulate Emission Limitations from Indirect Heating)

The following facilities are subject to 326 IAC 6-2-4, (Particulate Emission Limitations for Sources of Indirect Heating):

- FAC-20, FAC-26 through FAC-30, FAC-32, FAC-36 through FAC-37, FAC-39 through FAC-41, FAC-43 through-80, FAC-110, FAC-117 through FAC-140, FAC-146 through FAC-170and FAC-51 through FAC-80;

- PA-05 and PA-07(burners for heated flash areas and bake ovens) and PO--02 (topcoat oven zone).

This rule limits the particulate to 0.28 pound per million Btu heat input from these facilities using the following equation:

$Pt = 1.09/(Q^{0.26})$

Where:

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 = 175.14 mmBtu heat input
Pt = 0.28 lb/mmBtu of heat input

(d) 326 IAC 2-2-4 (Air Quality Analysis Requirements)

Section (4)(a) of this rule, requires that the PSD application shall contain an analysis of ambient air quality in the area that the major stationary source would affect for pollutants that are emitted at major levels or significant amount. Honda Manufacturing of Indiana, LLC has submitted air quality analysis, which has been evaluated by Technical Support and Modeling Section. See details in Appendix C.

(e) 326 IAC 2-2-5 (Air Quality Impact Requirements)

326 IAC 2-2-5(e)(1) of this rule, requires that the air quality impact analysis required by this section shall be conducted in accordance with the following provisions:

(1) Any estimates of ambient air concentrations used in the demonstration processes required by this section shall be based upon the applicable air quality models, data bases, and other requirements specified in 40 CFR Part 51, Appendix W (Requirements for Preparation, Adoption, and Submittal of Implementation Plans, Guideline on Air Quality Models)*.

(2) Where an air quality impact model specified in the guidelines cited in subdivision (1) is inappropriate, a model may be modified or another model substituted provided that all applicable guidelines are satisfied.

(3) Modifications or substitution of any model may only be done in accordance with guideline documents and with written approval from U.S. EPA and shall be subject to public comment procedures set forth in 326 IAC 2-1.1-6.

(f) 326 IAC 2-2-6 (Increment Consumption Requirements)

326 IAC 2-2-6(a) requires that any demonstration under section 5 of this rule shall demonstrate that increased emissions caused by the proposed major stationary source will not exceed eighty percent (80%) of the available maximum allowable increases (MAI) over the baseline concentration of sulfur dioxide, particulate matter, and nitrogen dioxide indicated in subsection (b)(1) of this rule.

(g) 326 IAC 2-2-7 (Additional Analysis, Requirements)

326 IAC 2-2-7(a) requires an analysis of the impairment to visibility, soils and vegetation. An analysis of the air quality impact projected for the area as a result of general

commercial, residential, industrial, and other growth associated with the source. See detailed analysis in Appendix C.

(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 perform analysis or 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 8-1-6 (General Reduction Requirements)

Plastic parts coating operation – The modification is subject to PSD BACT requirements, since VOC emissions exceed the major source threshold, pursuant to 326 IAC 2-2-3 (PSD Rule: Control Technology Review Requirements). The PSD BACT determined for the plastic parts shall satisfy the requirements of 326 IAC 8-1-6 (General Reduction Requirements). All operations subject to 326 IAC 8-2-2 are not subject to 326 IAC 8-1-6.

(h) 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies)

326 IAC 6-3 (Control Technology Requirements for Particulate Emissions is not applicable to the proposed source because it is subject to 326 IAC 2-2-3, where Particulate Matter limitations have been established under the Prevention of Significant Deterioration (PSD) Best Available Control Technology (BACT) requirements.

Proposed Changes

The changes listed below have been made to PSD/Part 70 Operating Permit No. T 031-23360-00026. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

1. General information has been updated in Section A.1. IDEM, OAQ has decided to remove the information regarding the Responsible Official from Section A.1 of the permit. IDEM, OAQ will continue to retain this information in their permit tracking system and will continue to evaluate whether a change in Responsible Official, meets the criteria specified in 326 IAC 2-7-1(34). Also, the source address has been updated throughout the permit.

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

The Permittee owns and operates an automotive and light-duty truck assembly plant.

~~Responsible Official:~~	~~Manager~~
Source Address:	~~Intersection of I-74 and N. Michigan Ave. at Exit 132~~, **2755 N. Michigan Ave.,**Greensburg, IN 47240
Mailing Address:	c/o Honda of America MFG., Inc., 24000 Honda Parkway, Marysville, OH 43040
General Source Phone Number:	(937) 644-7757
SIC Code:	3711, 3714
County Location:	Decatur County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Major Source, Section 112 of the Clean Air Act

Prevention of Significant Deterioration (PSD)/Part 70 Operating Permit
OFFICE OF AIR QUALITY

Honda Manufacturing of Indiana, LLC
~~Intersection of I-74 and~~ **2755** N. Michigan Ave. ~~at Exit 132~~
Greensburg, Indiana 47240

PART 70 OPERATING PERMIT CERTIFICATION

Source Name:	Honda Manufacturing of Indiana, LLC
Source Address:	~~Intersection of I-74 and~~ **2755** N. Michigan Avenue~~, at Exit 132~~, Greensburg, Indiana 47240
Mailing Address:	Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, Ohio, 43040
PSD/Part 70 Permit No.:	031-23360-00026

2. OAQ has updated its address to include the Mail Code throughout the permit as follows:

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

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

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

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

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE 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

3. Condition C.18 General Record Keeping Requirements has been modified. The clean unit and pollution control project provisions of the U.S. EPA's New Source Review Reform Rules were vacated on June 24, 2005 by a United States Court of Appeals for the District of Columbia Circuit decision. This decision also remanded the "reasonable possibility" standard back to U.S. EPA. The OAQ plans to remove the vacated provisions from 326 IAC 2 at the next state rulemaking opportunity. Paragraph (c) of Condition C.18 General Recordkeeping Requirements has been revised to reflect the court decision.

C.18 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. 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, all record keeping requirements not already legally required shall be implemented when operation begins.

(c) If there is ~~a reasonable possibility that~~ a “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) **affecting** ~~at~~ an existing emissions unit, **other than a source with a Plantwide Applicability Limitation (PAL)** ~~projects at a Clean Unit)~~, which is not part of a “major modification” (as defined in 326 IAC 2-2-1 (ee) and/or 326 IAC 2-3-1 (z)) ~~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) and/or 326 IAC 2-3-1 (mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) 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(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii)); and
(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

4. Sections A.2 and A.3 have been revised as follows to reflect the requested revisions to emission units:

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) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

(A) Multistage pretreatment/Phosphate Process, identified as PA-01 IA.

(B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID 1100.

(C) One (1) E-Coat pre-heat zone, with a maximum heat input capacity of ~~5.175~~ **3.7**MMBtu/hr, exhausting to ~~one (1)~~ stack ID 1003.

(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of ~~the following ovens~~, **five oven zones, each with a heat input capacity of 3.7 MMBtu/hr**, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

~~(i) Oven zone 1, with a heat input capacity of 3.85 million British thermal units per hour (MMBtu/hr).~~
~~(ii) Oven zone 2 with a heat input capacity of 2.75 million British thermal units per hour (MMBtu/hr).~~
~~(ii) Oven zone 3, zone 4, and zone 5, each with a heat input capacity of 5.175 million British thermal units per hour (MMBtu/hr).~~

(E) One (1) cooling tunnel, exhausting to ~~one (1)~~ stack ID 1006.

(2) Sealer Deadener Coating Line, identified as PA-03, with a capacity of 73 units per hour, consisting of ~~the following:~~

~~(A)~~ ~~O~~one (1) automatic and manual sealer deadener application area, **and one (1) sound deadener booth, using airless spray application system,** exhausting to ~~one~~ stack ID 1007.

~~(B) One (1) sound deadener booth, using airles spray application system, exhausting to one stack ID 1008.~~

~~(C) One (1) natural gas-fired Sealer Deadener 2-stage drying oven, which consists of two (2) zones with one (1) 5.175 MMBtu/hr oven on each zone, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.~~

~~(D) One (1) cooling tunnel, exhausting to one (1) stack ID1011.~~

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(A) One (1) Primer/Surfacer spray coating booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system and dry filters to control particulate overspray, exhausting to ~~three (3)~~ stack~~s~~ ID 1014~~,~~ **and stack** ID1015~~, and ID 1016~~.

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, ~~each~~ **one** with a maximum heat input capacity of ~~3.85~~ **3.5** MMBtu/hr **and one with a maximum heat input capacity of 2.6 MMBtu/hr**.

(C) One (1) natural gas-fired Primer/Surfacer ~~6~~ **5**-stage oven tunnel, which consists of ~~six (6)~~ **five (5)** zones**,** ~~with one (1) 2.75 MMBtu/hr burner on each zone~~ **oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr**, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

~~(D) Two (2) surfacer natural gas-fired oven fresh air, identified as #1 and #2, each with a maximum heat input of 2.75 MMBtu/hr.~~

(D) One (1) oven exit hood exhaust, exhausting to stack ID 1021.

(E) One (1) cooling tunnel, exhausting to ~~one (1)~~ stack ID 1022.

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(A) Two (2) basecoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash systems and dry filters to control particulate overspray, exhausting to stack ID 1032 and stack ID 1043.

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of ~~2.75~~ **2.6** MMBtu/hr, exhausting to stack ID 1033 and stack **ID** 1044.

(C) Two (2) clearcoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems. The automatic zones use water/oil emulsion wash systems to control particulate overspray and the manual zones use dry filters. The manual zones are cascaded to the automatic zones, and the automatic zones are controlled by one (1) RTO, identified as RTO #2 with stack ID 1101.

(D) One (1) natural gas-fired Topcoat ~~3~~ **5**-stage oven tunnel, for Topcoat Line #1 which consists of ~~three (3)~~ **five (5)** zones ~~with one (1) 2.75 MMBtu/hr burner on each zone~~**, oven zone #1, with a heat input capacity of 3.5 MMBtu/hr, oven zone #2, with a heat input capacity of 2.6 MMBtu/hr, and oven zones #3, #4 and #5 , each with a heat input capacity of 1.7 MMBtu/hr**, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

~~(E) One (1) natural gas-fired Topcoat 3-stage oven tunnel, for Topcoat Line #2 which consists of three (3) zones with one (1) 2.75 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.~~

~~(F) Two (2) natural gas-fired oven fresh air, for Topcoat Line #1and Topcoat Line #2, each with a maximum heat input of 2.75 MMBtu/hr.~~

~~(G)~~**(E)** ~~Two (2)~~ **One (1)** cooling tunnel~~s~~, exhausting to ~~one (1)~~ stack ID 1041 ~~and ID 1052~~.

(F) One (1) oven exit hood exhaust, exhausting to stack ID 1037.

~~(H)~~**(G)** Topcoat on-line repair, identified as PA-07 which includes:

- (i) One (1) repair sanding booth, identified as PA-08 controlled by dust filters, exhausting to stack ID 1056.
- (ii) One (1) repair coating booth using water/oil emulsion wash system to control particulate overspray, exhausting to stack ID 1057.
- (iii) One(1) natural gas-fired repair oven, with a maximum heat input capacity of ~~1.65~~ **2.6** MMBtu/hr, exhausting to stack ID 1058.
- (iv) One (1) Cooling tunnel, exhausting to ~~one (1)~~ stack ID 1060.
- (v) One (1) small repair booth, exhausting to ~~one (1)~~ stack ID 1055, with ~~one~~ infrared ~~bake oven~~ **curing that consists of three (3) banks of portable infrared lights.**

~~(I)~~**(H)** Air makeup units as follows:

- (i) Two (2) natural gas-fired air makeup units, for the Topcoat Lines #1 and #2 basecoat booths, each equipped with a two-stage burner, each with a combined maximum heat input capacity of ~~11~~ **9.2** MMBtu/hr.

- (ii) Two (2) natural gas-fired air makeup units, for Topcoat Lines #1 and #2 clearcoat booths, each equipped with a two-stage burner, each with a combined maximum heat input capacity of ~~9~~ **5.8** MMBtu/hr.

(iii) One (1) natural gas-fired air makeup unit, for the topcoat on-line repair operations, equipped with a two-stage burner, with a combined maximum heat input capacity of ~~16~~ **12.2** MMBtu/hr.

(iv) One (1) natural gas-fired air makeup unit, for the primer/surfacer line, equipped with a two-stage burner, with a combined maximum heat input capacity of ~~15~~ **7.8** MMBtu/hr.

(5) Blackout/Cavity wax coating booth, identified as PA-11, equipped with dry filters, exhausting to stack ID 1062.

(6) Miscellaneous cleaning and purge operation – paint operations, consisting of the following:

(A) Purge and clean-up solvent usage and recovery system, identified as PA-14, including virgin solvent distribution, day tanks, **small** portable containers **including containers that meet the definition of cold cleaners**, and spent solvent recovery.

(B) One (1) virgin purge solvent storage tank, identified as PA-18, located outside the paint department, with a capacity of 7,000 gallons.

(C) One (1) spent purge solvent storage tank, identified as PA-19, located outside the paint department, with a capacity of 7,000 gallons.

(7) Paint effluent system, identified as PA-17, consisting of sludge for separation of paint solids form booth water/oil emulsion wash systems for body and plastic parts painting. Solids are chemically separated and sent off-site. Water/oil emulsion is recycled to paint booths or sent to wastewater treatment.

(8) One (1) natural gas-fired air makeup unit, with a maximum heat input capacity of ~~14.00~~ **20.0** MMBtu/hr**, identified as PA-21**.

~~(9) Four (4) natural gas-fired HVAC units, identified as FAC-21, FAC-22, FAC-23, and FAC-24, with respective maximum heat input capacities of 16.00 MMBtu/hr, 16.00 MMBtu/hr, 14.00 MMBtu/hr and 3.00 MMBtu/hr.~~

(9) One (1) natural gas-fired air makeup unit, with a maximum heat input capacity of 8.0 MMBtu/hr, identified as PA-22.

~~(10) One (1) natural gas-fired paint mix HVAC unit, identified as FAC-25, with a maximum heat input capacity of 2.75 MMBtu/hr.~~

(10) One (1) natural gas -fired makeup unit with a maximum heat input capacity of 5.0 MMBtu/hr, identified as PA-23.

(11) Two (2) natural gas-fired HVAC units, identified as PA-24 and PA-25, each with a maximum heat input capacity of 13.0 MMBtu/hr.

(12) One (1) natural gas-fired HVAC unit, with a maximum heat input capacity of 8.0 MMBtu/hr, identified as PA-26.

(b) Plastics Operations:

(1) ~~Facia/Bumber~~ **Plastic Parts** Coating Line, identified as PO-02, with a capacity of 120 hangers per hour, consisting of the following:

(A) Alkaline pretreatment process, identified as PO-01.

(B) One (1) dry-off tunnel, exhausting to ~~one (1)~~ stack ID 2000.

(C) One (1) primer spray booth, utilizing High Volume Low Pressure (HVLP) and/or electrostatic application systems, using water/oil emulsion wash to control particulate overspray, exhausting to stack ID 2002.

~~(D) One (1) primer flashoff zone with one (1) natural gas-fired heater, with a maximum heat input capacity 2.75 MMBtu/hr.~~

~~(E)~~**(D)** One (1) basecoat spray booth, utilizing High Volume Low Pressure (HVLP) **and electrostatic bell application systems**, using water/oil emulsion wash system to control particulate overspray~~, exhausting to stack ID2002~~. **If waterborne basecoat is utilized, the basecoat spray booth will exhaust to stack ID 2003 and stack ID 2004. If solventborne basecoat is utilized, the basecoat spray booth will be controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.**

~~(F) One (1) basecoat flashoff area, with one (1) natural gas-fired heater, with a maximum heat input capacity 2.75 MMBtu/hr.~~

~~(G)~~**(E)** One clearcoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray, and VOC emissions controlled by one (1) RTO, with a maximum heat input capacity of 14.0 MMBtu/hr, identified as RTO #3, with stack ID 2029.

~~(H)~~**(F)** One (1) clearcoat flashoff area.

~~(I) One (1) clearcoat oven with a maximum heat input capacity of 3.875 MMBtu/hr, controlled by one (1) RTO, identified as RTO #3 with stack ID2029.~~

(G) One (1) plastic parts oven tunnel which consists of two (2) zones with one (1) 2.6 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

~~(J)~~**(H)** ~~Two (2)~~ **One (1)** natural gas-fired air makeup unit~~s~~, ~~each~~ equipped with a two-stage burner, each with a combined maximum heat input capacity of 19 MMBtu/hr.

~~(2) Instrument Panel Painting Line, identified as PO-03, with a capacity of 125 hangers per hour, consisting of the following:~~

~~(A) One (1) spray booth, utilizing High Volume Low Pressure (HVLP) application system, using a dry filter to control particulate overspray, exhausting to stack 2010.~~

~~(B) One (1) flashoff tunnel.~~

~~(C) One (1) curing oven, with a maximum heat input capacity of 0.88 MMBtu/hr, exhausting to stack 2011.~~

~~(3)~~**(2)** Miscellaneous cleaning and purge operation – plastics painting, consisting of the following:

(A) Purge and clean-up solvent usage and recovery system, identified as PO-05, including virgin solvent distribution, day tanks, portable containers, and spent solvent recovery.

(B) One (1) virgin purge solvent storage tank, identified as PO-09, located outside the plastics department, with a capacity of 7,000 gallons.

(C) One (1) spent purge solvent storage tank, identified as PO-10, located outside the plastics department, with a capacity of 7,000 gallons.

~~(4)~~**(3)** Three (3) plastic parts injection molding machines, identified as PO-06, PO-07, and PO-08, with a combined maximum throughput of 4,050 pounds per hour plastic pellets.

~~(5)~~**(4)** ~~Two (2)~~ **Three (3)** plastic pellets storage silos, storage #1 is identified as PO-11~~and~~ **,** storage #2 is identified as PO-12 **and storage #3 is identified as PO-18**.

~~(6) One natural gas-fired HVAC unit, identified as FAC-87, with a maximum heat input capacity of 13.00 MMBtu/hr.~~

(5) One (1) Plastic parts touchup booth, identified as PO-17, using dry filters for particulate control and manual application systems.

(6) Two (2) painted/raw plastic parts regrind machines, identified as PO-15 and PO-16.

(7) Two (2) plastic flash torches, with a maximum heat input capacity of 0.10 MMBtu/hr each, identified as PO-14 and PO-19.

(c) Final Assembly Operations:

(1) Assembly window install and miscellaneous operations, identified as AF-01, with a capacity of 70 units per hour, consisting of all coatings, sealers, lubricants and related cleaning solvents used for auto assembly, including processes used to install window glass in vehicles, including body primer, glass cleaner, glass primer, and glass adhesive. Includes robotic and manual application equipment, coating delivery/circulation systems and raw material storage containers.

(2) Gasoline dispensing operation, with a capacity of 70 units per hour, consisting of the following:

(A) Gasoline dispensing equipment, identified as AF-02, located at the assembly line, for filling new vehicles. Stage 2 vapor recovery control will be utilized, either through onboard Stage 2 vapor recovery or separate Stage 2 vapor recovery system.

(B) Two (2) gasoline storage tanks, identified as FAC-99 and FAC-100, located at the tank farm, each with a capacity of 19,800 gallons, each equipped with submerged fill and Stage 1 vapor balance.

(d) Weld sealer process using manual and robotic weld sealer application equipment, material delivery systems and raw material storage, identified as WE-01.

(e) Two (2) diesel fired ~~back-up~~ **emergency** generators, identified as FAC-84 and FAC-85, each with a rated capacity ~~equal to or less than 499 horsepower (HP)~~ **of 500 kilowatts (kw).**

(f) One (1) diesel fired back-up generator, identified as FAC-86, with a rated capacity equal to or less than ~~250 kilowatts per hour~~ **100 kilowatts (Kw)**.

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

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

(a) Painting Operations:

(1) E-Coat sanding and inspection booth, identified as PA-04, using dry filters for particulate control, exhausting to general ventilation.

(2) Primer/Surfacer sanding and inspection booth, identified as PA-06, using dry filters for particulate control, exhausting to general ventilation.

(3) Topcoat in-line repair, which includes repair area for small interior topcoat, imperfections, manual application equipment, identified as PA-09.

(4) Topcoat manual sanding and inspection area, identified as PA-10.

(5) One (1) plastic coating line masking booth.

(6) One (1) plastic coating line air blow booth.

(7) Final Repair, identified as PA-12, which includes repair coating booths and general areas, using manual application systems, and IR curing equipment.

(8) Final Repair - Air Dry, identified as PA-13, using air dry materials and manual application system.

(9) Paint Mix Rooms (Emissions accounted for in the emission determinations at each respective source).

(10) One (1) Plastic parts touchup booth, identified as PO-17, using dry filters for particulate control and manual application systems.

(b) 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) ~~Two~~ **One (1)** natural gas-fired hot water heater~~s~~ **(FAC-110)** for the purpose of supplying hot water to the café kitchen, with a ~~combined~~ maximum heat input capacity of ~~0.48~~ **0.50** MMBtu/hr.

(2) Four (4) natural gas-fired hot water generators, located in the body painting area, with a combined maximum heat input capacity of 24.5 MMBtu/hr.

~~(3) One natural gas-fired immersion heater, located in the plastics painting area, with a maximum heat input capacity of 5.30 MMBtu/hr.~~

~~(4)~~**(3)** ~~Air Makeup units:~~

~~(A) One (1) natural gas-fired air makeup unit for the E-Coat sanding and inspection booth (PA-04), equipped with a two-stage burner, with a maximum heat input capacity of 5.30 MMBtu/hr.~~

~~(B)~~ One (1) natural gas-fired air makeup unit for the Primer/Surfacer sanding and inspection booth (PA-06), ~~equipped with a two-stage burner,~~ with a maximum heat input capacity of ~~10~~ **6.4** MMBtu/hr.

~~(C) One (1) natural gas-fired air makeup unit for the Primer/Surfacer sanding and inspection booth (PA-06), with a maximum heat input capacity of 6.4 MMBtu/hr.~~

~~(D) One (1) natural gas-fired air makeup unit for the Primer/Surfacer sanding and inspection booth (PA-06), with a maximum heat input capacity of 6.4 MMBtu/hr.~~

~~(5)~~**(4)** Twenty-eight (28) natural gas-fired space heaters **(FAC-53 through FAC-80),** with a combined maximum heat input capacity of ~~5.50~~ **3.4** MMBtu/hr.

~~(6)~~**(5)** Natural gas-fired HVAC units **(FAC-01 through FAC-7, FAC-11 through FAC-20, FAC-26 through FAC-30, FAC-32, FAC-35 through FAC-37, FAC-39 through FAC-41, FAC-43 through FAC-52, FAC-146, FAC-147 and FAC-170),** with a combined maximum heat input capacity of ~~122.3~~ **87.5** MMBtu/hr.

(6) Forty three (43) natural gas-fired space heaters (FAC-117 through FAC-130, FAC-133 through FAC-139, FAC-148 through FAC-150 and FAC-151 through FAC-169), with a combined maximum heat input capacity of 6.9 MMBtu/hr.

(7) Four (4) natural gas-fired HVAC units (FAC-116, FAC-131, FAC-132 and FAC-140), with a combined maximum heat input capacity of 2.2 MMBtu/hr.

(c) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

~~(A) One (1) diesel fuel storage tank for distribution building generator, identified as FAC-88, with a capacity of 300 gallons, equipped with submerged fill.~~

~~(B) Two (2) diesel fuel storage tanks for back-up generators, identified as FAC-91 and FAC-92, each with a capacity of 250 gallons, equipped with submerged fill.~~

~~(C)~~**(A)** Two (2) diesel fuel storage tanks for fire pumps, identified as FAC-93 and FAC-94, each with a capacity of ~~500~~ **300** gallons, each equipped with submerged fill.

~~(D)~~**(B)** ~~One (1)~~ **Three (3)** diesel fuel storage tanks for ~~substation~~ generator**s**, identified as FAC-95**, FAC-177 and FAC-178, each** with a capacity of 150 gallons.

(2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(d) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.

(1) Periodic application of rust preventive oils to body steel for corrosion protection, identified as WE-03.

(e) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(f) Cleaners and solvents ~~characterized as follows:~~

~~(1) H~~ having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100^{o}F).

(g) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment:

(1) One (1) Stamping Shop - Four (4) press stamping lines, stamped parts repair and die maintenance activities, including hand held grinders, sanders, files, portable MIG welding, arc, welding, and stick welding.

(2) Body welding and finishing, identified as WE-02, using resistance welding and grinding, and ~~six (6)~~ MIG welding stations. The **SR station "Stationary Robots" and back-up** MIG welding and grinding operations are controlled by cartridge filters.

(3) Portable MIG, arc and TIG welding, identified as WE-06.

(h) Infrared cure equipment.

(i) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(1) Industrial WWT operations, identified as FAC-112, for pretreatment for metals removal using a chemical precipitation process.

(j) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.

(k) Noncontact cooling tower systems with forced and/or induced draft cooling tower system not regulated under a NESHAP.

(1) One (1) forced draft chiller cooling tower, identified as FAC-105, with a capacity of 20,000 gallons per minute.

(2) One (1) forced draft air compressor cooling tower, identified as ~~FAC-106~~ **FAC-107**, with a capacity of ~~2,370~~ **940** gallons per minute.

~~(3) One (1) forced draft PO/ST cooling tower, identified as FAC-107, with a capacity of 877 gallons per minute.~~

(l) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(m) Heat exchanger cleaning and repair.

(n) Process vessel degreasing and cleaning to prepare for internal repairs.

(o) Paved and unpaved roads and parking lots with public access.

(p) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(q) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(r) On-site fire and emergency response training approved by the department.

(s) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower.

(1) One (1) ~~substation~~ emergency generator, identified as FAC-81, with a capacity of ~~75~~ **81** ~~kilowatt per hour~~ **kilowatts (kw)**.

(2) One (1) Consolidation Center emergency generator, identified as FAC-89, with a capacity of 81 kilowatts (kw).

(3) One (1) Credit Union building emergency generator, identified as FAC-115, with a capacity of 81 kilowatts (kw).

(t) Other emergency equipment as follows: Stationary fire pumps.

(1) Two (2) stationary fire pumps, identified as FAC-82 and FAC-83, each with a rated capacity of ~~400~~ **183** horsepower.

(u) **Emergency generators as follows: Gasoline generators not exceeding 110 horsepower.**

(1) **Two (2) emergency generators, identified as FAC-145 and FAC-175, with a capacity of 3.0 kilowatts (kw) each.**

~~(u)~~**(v)** A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

~~(v)~~**(w)** Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(1) One (1) wheelabrator unit, identified as PA-15.

~~(w)~~**(x)** A laboratory as defined in 326 IAC 2-7-1(21)(D).

(1) One (1) paint test lab, identified as PA-16, with a capacity of 15 panels per hour.

(y) **Enclosed systems for conveying plastic raw materials and plastic finished goods as defined in 326 IAC 2-7-1(21)(G).**

~~(x)~~**(z)** Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 26 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) Windshield washer fluid fill operation, with a capacity of 70 units per hour, consisting of the following:

(A) Water/methanol fluid mixing and dispensing equipment, identified as AF-03, located at the assembly line, for filling new vehicles.

(B) One (1) windshield washer fluid storage tank, identified as FAC-102, located at the tank farm, with a capacity of ~~4,900~~ **2,000** gallons, equipped with submerged fill.

(2) The following tanks, located at the Tank Farm:

(A) One (1) automatic transmission fluid storage tank, identified as FAC-96, with a capacity of ~~15,000~~ **10,000** gallons, equipped with submerged fill.

(B) One (1) antifreeze storage tank, identified as FAC-103, with a capacity of ~~15,000~~ **10,000** gallons, equipped with submerged fill.

~~(C) One (1) diesel fuel storage tank, identified as FAC-90, with a capacity of 3000 gallons, equipped with submerged fill.~~

~~(D)~~**(C)** One (1) brake fluid storage tank, identified as FAC-98, with a capacity of ~~4,000~~ **2,000** gallons, equipped with submerged fill.

~~(E)~~**(D)** One (1) power steering fluid storage tank, identified as FAC-101, with a capacity of ~~8,000~~ **2,000** gallons, equipped with submerged fill.

~~(F)~~**(E)** One (1) manual transmission fluid storage tank, identified as FAC-104, with a capacity of ~~8,000~~ **2,000** gallons, equipped with submerged fill.

~~(G)~~**(F)** One (1) diesel fuel storage tank for yard truck operations, identified as MS-01, with a capacity of ~~4,000~~ **3,000** gallons, equipped with submerged fill.

(3) The following tank, located at the Utility Building:

(A) One (1) diesel fuel storage tank, identified as FAC-90, with a capacity of 2,000 gallons, equipped with submerged fill.

~~(3)~~**(4)** One (1) compressed natural gas tank, identified as AF-04, for filling CNG vehicles.

~~(4)~~**(5)** ~~One (1)~~ **Eight (8)** cold cleaner degreaser**s**, identified as ST-02**, MS-02, WE-07, AF-05, VQ-01, PA-27, PO-20 and FAC-176**, located at **designated areas** ~~the stamping area~~.

~~(5)~~**(6)** One (1) BPA Polish booth, identified as PO-04, consisting of manual air tools for scuffing, polishing, and buffing painted plastic parts.

~~(y)~~**(aa)** General List of Trivial/Insignificant Activities

(1) Water related activities including:

(A) Production of hot water for on-site personal use not related to any industrial or production process.
(B) Cooling ponds.
(C) Pressure washing of equipment.
(D) Water jet cutting operations.

(2) Combustion Activities including the following:

(A) Portable electrical generators that can be moved by hand from one location to another.
(B) Fuel use related to food preparation for on-site consumption.
(C) Combustion emissions from propulsion of mobile sources.
(D) Tobacco smoking rooms and areas.
(E) Indoor and outdoor kerosene heaters.

(3) Ventilation and venting related equipment including the following:

(A) Stacks and vents from plumbing traps used to prevent the discharge of sewer gases, handling domestic sewage only, excluding those at wastewater treatment plants or those handling any industrial waste.

(B) Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.

(C) Air vents from air compressors.

(D) Ventilation exhaust, central chiller water systems, refrigeration and air conditioning equipment, not related to any industrial or production process, including natural draft hoods, or ventilating systems that do not remove air pollutants.

(4) Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process including the following:

(A) Activities associated to routine fabrication, maintenance of paved and unpaved rods, including paving or sealing, or both, of parking lots and roadways.

(B) Painting including interior and exterior painting of buildings, and solvents use, excluding degreasing utilizing halogenated solvents.

(C) Brazing, soldering, or welding operation and associated equipment.

(D) Batteries and battery charging stations, except at battery manufacturing plants.

(E) Lubrications, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.

(F) Non-asbestos insulation installation or removal.

(G) Tarring, retarring and repair of building roofs.

(5) Activities performed using hand-held equipment including the following:

- Buffing	- Carving	- Cutting, excluding cutting torches
- Drilling	- Routing	- Surface grinding
- Grinding	- Sanding	- Turning wood, metal or plastic
- Polishing	- Surface grinding-	
- Sawing	- Machining wood, metal or plastic	

(6) Housekeeping and janitorial activities and supplies including the following:

(A) vacuum cleaning systems used exclusively for housekeeping or custodial activities or both.
(B) Restrooms and associated cleanup operations and supplies.
(C) Alkaline or phosphate cleaners and associated equipment.
(D) Mobile floor sweepers and floor scrubbers.
(E) Pest control fumigation.

(7) Office related including the following:

(A) Office supplies and equipment.
(B) Photocopying equipment and associated supplies.
(C) Paper shredding.
(D) Blueprint machines, photographic equipment, and associated supplies.

(8) Sampling and testing equipment and activities including the following:

(A) Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.

(B) Sampling activities including: Sampling of waste.

(C) Instrument air dryers and distribution.

(9) Storage equipment and activities including:

(A) Pressurized storage tanks and associated piping for inorganic compounds**, acetylene, liquid natural gas (LNG), propane as liquid petroleum gas (LPG), carbon dioxide (CO_2)** and natural gas.

(B) Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP.

(i) One (1) sulfuric acid storage tank, identified as FAC-109.

(C) Storage of drums containing maintenance raw materials.

(D) Portable container used for the collection, storage, or disposal of materials provided the container capacity is equal to or less than 0.46 cubic meters and the container is closed except when the material is added or removed.

(10) Emergency and standby equipment including:

(A) Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.

(B) Process safety relief devices installed solely for the purpose of minimizing injury to persons or damage to equipment which could result from abnormal process operating conditions, including the following:

(i) Explosion relief vents, diaphragms or panels.
(ii) Rupture discs.
(iii) Safety relief valves.

(C) Activities and equipment associated with on-site medical care not otherwise specifically regulated.

(D) Vacuum producing devices for the purpose of removing potential accidental releases.

(11) Activities associated with production including the following:

(A) Electrical resistance welding.
(B) Drop hammers or hydraulic presses for forging or metalworking.
(C) Air compressors and pneumatically operated equipment, including hand tools.
(D) Compressor or pump lubrication and seal systems.
(E) Handling of solid steel, including coils and slabs, excluding scrap burning, scarfing, and charging into steel making furnaces and vessels.

(12) Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following:

(A) Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOCs and HAPs.
(B) Condensate drains for natural gas and landfill gas.

(C) Manual loading and unloading operations.
(D) Construction and demolition operations.
(E) Non-volatile mold release waxes and agents

(13) Lawn care and landscape maintenance activities and equipment, including the storage, spraying or application of insecticides, pesticides and herbicides.

(14) Use of consumer products and equipment where the product or equipment is used at a source in the same manner as normal consumer use and is not associated with any production process.

(15) Activities generating limited amounts of fugitive dust including: Road salting and sanding.

5. Section D.1 conditions have been revised as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

Source-Wide Operations

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

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

Pursuant to 326 IAC 2-2-3 (BACT), the proposed automobile and light-duty truck assembly plant shall be limited as follows:

(b) The total VOC usage from all surface coating operations; E-Coat Line (PA-02), Sealer/Deadener (PA-03), Primer/Surfacer (PA-05), Topcoat Coating Line and On-Line Repair (PA-07), Blackout/Cavity Wax Coating Line (PA-11), and ~~Fascia/Bumper~~ **Plastic Parts**, shall be limited such that the total VOC emissions shall not exceed ~~322.7~~ **330.2** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with paragraph (a) of this condition is also necessary to render PSD not applicable for CO and SO_2 emissions.

Compliance Determination Requirement

D.1.2 Prevention of Significant Deterioration (PSD) VOC BACT limits [326 IAC 2-2]

Compliance with the VOC limit in Condition D.1.1 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:

Body Painting VOC Emissions (tons/month) = E-Coat Line (PA-02) + Sealer/Deadener (PA-03) + Primer/Surfacer (PA-05) + Topcoat Coating Line and On-Line Repair (PA-07) + Blackout/Cavity Wax Coating Line (PA-11) + ~~Fascia/Bumper~~**Plastic Parts** VOC

D.1.3 Regenerative Thermal Oxidizers (RTOs) [326 IAC 2-2]

(a) In order to demonstrate compliance with Condition D.1.1 and the requirements of 326 IAC 2-2-3 (BACT), the regenerative thermal oxidizers (RTOs) shall operate at all times when the processes being controlled are in operation.

(b) The bypass line for each capture system shall not be used to divert emissions away from the RTOs to the atmosphere, but shall only be used for VOC purge to prevent fire prior to the coating operation**, and during cleaning operations, other non-standard equipment testing and non-production times when air supply houses remain in operation. If emissions occur from testing, cleaning and other activities, those emissions must be tracked separately**.

6. Section D.2 conditions have been revised as follows:

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

(A) Multistage pretreatment/Phosphate Process, identified as PA-01 IA.

(B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID 1100.

(C) One (1) E-Coat pre-heat zone, with a maximum heat input capacity of ~~5.175~~ **3.7** MMBtu/hr, exhausting to ~~one (1)~~ stack ID 1003.

(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of ~~the following ovens~~ **five (5) oven zones, each with a heat input capacity of 3.7 MMBtu/hr**, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

~~(i) Oven zone 1, with a heat input capacity of 3.85 million British thermal units per hour (MMBtu/hr).~~
~~(ii) Oven zone 2 with a heat input capacity of 2.75 million British thermal units per hour (MMBtu/hr).~~
~~(iii) Oven zone 3, zone 4, and zone 5, each with a heat input capacity of 5.175 million British thermal units per hour (MMBtu/hr).~~

(E) One (1) cooling tunnel, exhausting to ~~one (1)~~ stack ID 1006.

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

7. Section D.3 conditions have been revised as follows:

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(2) Sealer Deadener Coating Line, identified as PA-03, with a capacity of 73 units per hour, consisting of ~~the following:(A) O~~one (1) automatic and manual sealer deadener application area, **and** ~~exhausting to one stack ID 1007.~~

~~(B)~~ ~~O~~ one (1) sound deadener booth, using airless spray application system, exhausting to ~~one~~ stack ID ~~1008~~**1007**.

~~(C) One (1) natural gas-fired Sealer Deadener 2-stage drying oven, which consists of two (2) zones with one (1) 5.175 MMBtu/hr oven on each zone, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.~~

~~(D) One (1) cooling tunnel, exhausting to one (1) stack ID1011.~~

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(A) One (1) Primer/Surfacer spray coating booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system and dry filters to control particulate overspray, exhausting to ~~three (3)~~ stack~~s~~ ID 1014~~,~~ **and stack** ID 1015~~, and ID1016~~.

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, ~~each~~ **one (1)** with a maximum heat input capacity of ~~3.85~~ **3.5** MMBtu/hr **and one (1) with a maximum heat input capacity of 2.6 MMBtu/hr**.

(C) One (1) natural gas-fired Primer/Surfacer ~~6~~**5**-stage oven tunnel, which consists of ~~six (6)~~ **five (5)** zones**, oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr** ~~with one (1) 2.75 MMBtu/hr burner on each zone~~, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.

(D) ~~Two (2) surfacer natural gas-fired oven fresh air, identified as #1 and #2, each with a maximum heat input of 2.75 MMBtu/hr.~~ **One (1) oven exit hood exhaust, exhausting to stack ID 1021.**

(E) One (1) cooling tunnel, exhausting to ~~one (1)~~ stack ID 1022.

(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) - Best Available Control Technology for Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3, the VOC Best Available Control Technology (PSD BACT) for the Primer/Surfacer Coating line, identified as PA-05, shall be as follows:

(a) The exhaust~~s~~ from the Primer/Surfacer Coating line drying oven ~~and Sealer Deadener Coating Line drying oven~~ shall be vented to regenerative thermal oxidizer RTO#1 (with stack ID1100). The thermal oxidizer shall achieve a minimum VOC destruction efficiency of 95%.

Compliance Determination Requirements

D.3.5 Regenerative Thermal Oxidizers (RTOs) [326 IAC 2-2] [326 IAC 8-2-2]

The exhaust~~s~~ from the Primer/Surfacer Coating Line (PA-05) ~~and Sealer Deadener (PA-03)~~ shall be vented to regenerative thermal oxidizer RTO#1 (with stack ID 1100) at all times **when the line is** ~~one or both coating lines are~~ in operation.

D.3.7 Testing Requirements [326 IAC 2-2] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the Primer/Surfacer Coating Line (PA-05), the E-Coat Coating Line (PA-02) in Section D.2, the Topcoat Coating Operation (PA-07) in SECTION D.4, and the Sealer Deadener (PA-03) in this SECTION D.3, the Permittee shall conduct initial performance tests of the Primer/Surfacer Coating Line (PA-05) (oven), the E-Coat Coating Line (PA-02) (E-Coat tank, rinse stages, and oven) in Section D.2, **and** the Topcoat Coating Operation (PA-07) (two drying ovens) in SECTION D.4~~, and the Sealer Deadener (PA-03) (drying oven) in this SECTION D.3~~, to determine compliance with the limits on VOC emissions, capture efficiency, and destruction efficiency of the regenerative thermal oxidizer (RTO#1 with stack ID 1100), and applicators transfer efficiencies, utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

(b) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of Primer/Surfacer Coating Line PA-05, in order to demonstrate compliance with Condition D.3.3, the Permittee shall conduct initial performance tests to measure the PM/PM10 emission rates in grains per standard cubic feet of exhaust air of the water/oil emulsion wash and dry filters controlling the Primer/Surfacer coating booth, utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.

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

D.3.12 Record Keeping Requirements [326 IAC 8-2-2]

(c) To document compliance with Condition D.3.2, 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.3.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the Primer/Surfacer Coating line (PA-05) and the E-Coat tank in SECTION D.2.

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(2) A log of the dates of use.

(3) The water content of each coating material used (as applied).

(4) The calculated daily volume weighted average VOC content per gallon of the coatings less water as applied from the Primer/Surfacer Coating line (PA-05) and the E-Coat Line (PA-02) in SECTION D.2.

~~(c)~~**(d)** To document compliance with Condition D.3.9, the Permittee shall maintain a log of weekly overspray observations, weekly observations of the water/oil level in the pans, and monthly inspections.

~~(d)~~**(e)** To document compliance with Condition D.3.10, the Permittee shall maintain records of the continuous temperature records (on a three-hour average basis) for the Primer/Surfacer Coating line ID PA-05 regenerative thermal oxidizer (RTO#1with stack ID 1100) and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

~~(e)~~**(f)** To document compliance with Condition D.3.3, the Permittee shall maintain on file vendors guarantees and/or certifications for the dry filters efficiency.

~~(f)~~**(g)** All records shall be maintained and available upon a request for inspection by the IDEM, OAQ and shall be in accordance with Section C - General Record Keeping Requirements, of this permit.

8. Section D.4 conditions have been revised as follows:

SECTION D.4 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of ~~2.75~~ **2.6** MMBtu/hr, exhausting to stack ID 1033 and stack **ID** 1044.

(C) Two (2) clearcoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems. The automatic zones use water/oil emulsion wash systems to control particulate overspray and the manual zones use dry filters. The manual zones are cascaded to the automatic zones, and the automatic zones are controlled by one (1) RTO, identified as RTO #2 with stack ID1101.

(D) One (1) natural gas-fired Topcoat ~~3~~**5**-stage oven tunnel, ~~for Topcoat Line #1~~ which consists of ~~three (3)~~ **five (5)** zones**, oven zone #1 with a heat input capacity of 3.5 MMBtu/hr, oven zone #2 with a heat input capacity of 2.6 MMBtu/hr and oven zones #3, #4, and #5, each with a heat input capacity of 1.7 MMBtu/hr** ~~with one (1) 2.75 MMBtu/hr burner on each zone~~, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.

~~(E) One (1) natural gas-fired Topcoat 3-stage oven tunnel, for Topcoat Line #2 which consists of three (3) zones with one (1) 2.75 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.~~

~~(F) Two (2) natural gas-fired oven fresh air, for Topcoat Line #1and Topcoat Line #2, each with a maximum heat input of 2.75 MMBtu/hr.~~

~~(G)~~**(E)** ~~Two (2)~~ **One (1)** cooling tunnel~~s~~, exhausting to ~~one (1)~~ stack ID1041 ~~and ID 1052~~.

(F) One (1) oven exit hood exhaust, exhausting to stack ID 1037.

~~(H)~~**(G)** Topcoat on-line repair, identified as PA-07, which includes:

(iii) One(1) natural gas-fired repair oven, with a maximum heat input capacity of ~~1.65~~ **2.6** MMBtu/hr, exhausting to stack ID 1058.

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 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the Topcoat Coating operation, Topcoat on-line repair, both identified as PA-07, and Topcoat in-line repair, identified as PA-09 shall be as follows:

(a) The capture systems for the clearcoat booths of the Topcoat Lines #1 and #2 shall be vented into one (1) RTO, identified as RTO#~~2~~**1** with stack ID~~1101~~ **1100**. The RTO shall achieve a minimum destruction efficiency of ninety-five percent (95%).

(b) The Topcoat drying oven shall be vented into one (1) RTO, identified as RTO #~~1~~**2** with stack ID~~1100~~ **1101**. The RTO shall achieve a minimum destruction efficiency of ninety-five percent (95%).

Compliance Determination Requirements

D.4.5 Regenerative Thermal Oxidizers (RTOs) [326 IAC 2-2] [326 IAC 8-2-2]

The exhausts from the clearcoat booths of the Topcoat Lines #1 and #2 shall be vented to regenerative thermal oxidizer (RTO#~~2~~**1** with stack ID ~~1101~~**1100**) at all times when one or both lines are in operation.

The exhausts from the Topcoat Drying Oven shall be vented to regenerative thermal oxidizer (RTO#~~1~~**2** with stack ID ~~1100~~**1101**) at all times when the oven is in operation.

D.4.7 Testing Requirements [326 IAC 2-2] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the Topcoat Coating Operation (PA-07), the E-Coat Coating Line (PA-02) in SECTION D.2, the Primer/Surfacer Coating Line (PA-05) in SECTION D.3, and the Sealer Deadener (PA-03) in SECTION D.3, the Permittee shall conduct initial performance tests of the Topcoat Coating Operation (PA-07) (~~two~~ **one** drying oven~~s~~), the E-Coat Coating Line (PA-02) (E-Coat tank, rinse stages, and drying oven) in SECTION D.2 ,**and** the Primer/Surfacer Coating Line (PA-05) (drying oven) in SECTION D.3~~, and the Sealer Deadener (PA-03) (drying oven) in SECTION D.3,~~ to determine compliance with the limits on VOC emissions, capture efficiency, and destruction efficiency of the regenerative thermal oxidizer (RTO#~~1~~**2** with stack ID~~1100~~ **1101**), and applicators transfer efficiencies, utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

(b) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the Topcoat Coating operation, identified as PA-07, the Permittee shall conduct initial performance tests of the new Topcoat Coating operation ID PA-07 (two clearcoat booths), to determine compliance with the limits on VOC emissions and destruction efficiency of the regenerative thermal oxidizer (RTO#~~2~~**1** with stack ID~~1101~~ **1100**), and applicators transfer efficiencies, utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

9. Section D.5 conditions have been revised as follows:

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(b) Plastics Operations:

(1) ~~Fascia/Bumper~~ **Plastic Parts** Coating Line, identified as PO-02, with a capacity of 120 hangers per hour, consisting of the following:

(A) Alkaline pretreatment process, identified as PO-01.

(B) One (1) dry-off tunnel, exhausting to ~~one (1)~~ stack ID 2000.

(C) One (1) primer spray booth, utilizing High Volume Low Pressure (HVLP) **and/or electrostatic application systems**, using water/oil emulsion wash system to control particulate overspray, exhausting to stack ID 2002.

~~(D) One (1) primer flashoff zone with one (1) natural gas-fired heater, with a maximum heat input capacity 2.75 MMBtu/hr.~~

~~(E)~~**(D)** One (1) basecoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray. If waterborne basecoat is utilized, the basecoat spray booth will exhaust to ~~two (2)~~ stack~~s with~~ ID 2003 and **stack** ID 2004. If solventborne basecoat is utilized, the basecoat spray booth will be controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

~~(F) One (1) basecoat flashoff area, with one (1) natural gas-fired heater, with a maximum heat input capacity 2.75 MMBtu/hr.~~

~~(G)~~**(E)** One clearcoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray, and VOC emissions controlled by one (1) RTO, with a maximum heat input capacity of 14.0 MMBtu/hr, identified as RTO #3 with stack ID 2029.

~~(H)~~**(F)** One (1) clearcoat flashoff area.

~~(I)~~**(G)** One (1) ~~clearcoat~~ **plastic parts** oven **tunnel which consists of two zones with one (1) 2.6 MMBtu/hr burner on each zone,** ~~with a maximum heat input capacity of 3.875 MMBtu/hr~~ controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

~~(J)~~**(H)** ~~Two (2)~~ **One (1)** natural gas-fired air makeup unit~~s~~, ~~each~~ equipped with a two-stage burner, ~~each~~ with a combined maximum heat input capacity of 19**.0** MMBtu/hr.

~~(2) Instrument Panel Painting Line, identified as PO-03, with a capacity of 125 hangers per hour, consisting of the following:~~

~~(A) One (1) spray booth , utilizing High Volume Low Pressure (HVLP) application system, using a dry filter to control particulate overspray, exhausting to stack 2010.~~

~~(B) One (1) flashoff tunnel.~~

~~(C) One (1) curing oven, with a maximum heat input capacity of 0.88 MMBTU/hr, exhausting to stack 2011.~~

(The information describing the process contained in this facility description box is descriptive information and does not consitute 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] [326 IAC 8-1-6]

Pursuant to 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line, identified as PO-02~~, the Instrument Panel Painting Line, identified as PO-03~~, and the plastic parts injection molding machines, identified as PO-06, PO-07, and PO-08, shall be as follows:

(b) The VOC emissions from the basecoat coating booth, shall not exceed 1.15 lbs/gal of coating applied, based on a daily volume weighted average.

(e) The daily volume weighted average of the VOC content of the coatings applied to the Instrument Panel~~, identified as PO-03~~, shall not exceed 2.3 lbs/gallon less water of coating applied.

D.5.2 PSD BACT for PM and PM10 [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the PM and PM10 emissions from the water/oil emulsion wash controlling the particulate emissions from the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line ID PO-02, shall be limited to 0.0015 grains per standard cubic foot (gr/scf) of exhaust air and 99% control efficiency. The Department may revise this permit to adjust the PM and PM10 limitation of 0.0015 gr/scf based upon the results of the stack test required in Condition D.5.5. PM-10 includes filterable and condensible PM-10. Any revisions of the emissions limits made as the result of this provision shall be subject to the best available control technology (BACT) review and air quality analysis, specified in 326 IAC 2-2. The Department will provide an opportunity for public notice and comment prior to finalizing any permit revision. IC 13-15-7-3 (revocation or Modification of a Permit: appeal to Board) shall apply to this permit condition.

~~(b) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (BACT), the PM and PM10 emissions from the dry filters controlling the Instrument Panel Coating Line ID PO-03, shall be limited to 0.0015 gr/scf of exhaust air. PM-10 includes filterable and condensible PM-10.~~

Compliance Determination Requirements

D.5.4 Regenerative Thermal Oxidizer (RTO) [326 IAC 2-2]

The exhausts from the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line ID PO-02 shall be vented to regenerative thermal oxidizer (RTO#3 with stack ID2029) at all times when the line is in operation.

D.5.5 Testing Requirements [326 IAC 2-2] [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line ID PO-02, the Permittee shall conduct initial performance tests of the new **Plastic**

Parts ~~Fascia/Bumper~~ Coating Line ID PO-02, to determine compliance with the limits on VOC emissions and destruction efficiency of the regenerative thermal oxidizer (RTO #3 with stack ID 2029), utilizing methods as approved by the Commissioner. This testing shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration.

(b) Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of **Plastic Parts** ~~Fascia/Bumper~~ Coating Line (PO-02), in order to demonstrate compliance with Condition D.5.2, the Permittee shall conduct initial performance tests to measure the PM/PM10 emission rates in grains per standard cubic feet of exhaust air of the water/oil emulsion wash controlling the primer booth, basecoat booth, and clearcoat booth of the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line (PO-02), utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10.

D.5.6 Volatile Organic Compounds (VOC) [326 IAC 2-2]

(b) Compliance with the PSD BACT VOC limits in Condition D.5.1(a) through (c) which apply after controls to emissions from the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line ID PO-02 shall be determined using the following equation:

$$DWA = \frac{\sum_{i=1}^{n} (C_i)(U_i) \times (1-(CE \times DRE))}{\sum_{i=1}^{n} U_i}$$

where:

DWA = daily calculated volume weighted average emissions in pounds per gallon coating applied.

C = VOC content of coating $_i$, lb VOC/gal

U = actual coating $_i$ usage, gal/day

n = no. of coatings used during the day

CE = capture efficiency of the emission system vented to the RTO

DRE =destruction/removal efficiency of the RTO

(c) Compliance with the PSD BACT VOC limit in Condition D.5.1(e) for ~~the~~ **Coating** Instrument Panel**s** ~~Coating Line ID PO-03~~ shall utilize the same equation in (b) ~~except Instrument Panel is an uncontrolled operation~~.

D.5.7 Regenerative Thermal Oxidizer (RTO) Temperature [326 IAC 2-2]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line ID PO-02, regenerative thermal oxidizer (RTO#3 with stack ID 2029) for measuring operating temperature. For the purposes of this condition, continuous shall mean no less than once per minute. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the three (3) hour rolling average operating temperature of the thermal oxidizer shall be maintained at a minimum temperature of 1400^{o}F.

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

D.5.8 Water/Oil Emulsion Wash and Dry Filters Monitoring

(a) For **Plastic Parts** ~~Fascia/Bumper~~ Coating Line ID PO-02:
Daily inspection shall be performed prior to the Fascia/Bumper Paint line operation to verify the proper placement and configuration of the baffle panels of

the water/oil emulsion wash system. Daily inspections shall be performed during the paint line's operation to verify the placement, integrity and particle loading of the dry filters, and to verify the proper flow of water/oil through the water/oil pan of the water/oil emulsion wash system that affect water/oil pan capture efficiency (e.g., debris in the water/oil pans). To monitor the performance of the water/oil emulsion wash, weekly observations shall be made of the overspray from the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line ID PO-02 stacks (ID 2002, ID 2203, ID 2204, and ID 2005), while one or more of the booths are in operation.

~~For Instrument Panel Coating Line ID PO-03 -~~
~~Daily inspections shall be performed during the paint booth's operation to verify the proper placement of the dry filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the Instrument Panel Coating Line ID PO-03 stack (ID2010), while it is operating.~~

If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances 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.5.10 Record Keeping Requirements [326 IAC 8-2-2]

(a) To document compliance with Condition D.5.1(a), (b), (c), and (e), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC emission limits established in Conditions D.5.1(a), (b), (c), and (e). Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount and VOC content of each coating material and solvent used daily for coatings applied by the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line, identified as PO-02**.**~~, and Instrument Panel Painting Line, identified as PO-03.~~

(A) Records shall include, but not limited to purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

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

(3) The calculated daily volume weighted average emission in pounds per gallon of coating applied from the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line, identified as PO-02~~, and Instrument Panel Painting Line, identified as PO-03~~.

(c) To document compliance with Condition D.5.8, the Permittee shall maintain records of the continuous temperature records (on a three-hour average basis) for the **Plastic Parts** ~~Fascia/Bumper~~ Coating Line ID PO-02 regenerative thermal oxidizer (RTO#3 with stack ID 2029) and the three-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

10. Section D.7 conditions have been revised as follows:

SECTION D.7 FACILITY OPERATION CONDITIONS

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

(6) Miscellaneous cleaning and purge operation – paint operations, consisting of the following:

(A) Purge and clean-up solvent usage and recovery system, identified as PA-14, including virgin solvent distribution, day tanks, **small** portable containers **including containers that meet the definition of cold cleaners**, and spent solvent recovery.

(b) Plastics Operations:

~~(3)~~**(2)** Miscellaneous cleaning and purge operation – plastics painting, consisting of ~~the following:~~

~~(A) P~~**p**urge and clean-up solvent usage and recovery system, identified as PO-05, including virgin solvent distribution, day tanks, portable containers, and spent solvent recovery.

~~(4)~~**(3)** Three (3) plastic parts injection molding machines, identified as PO-06, PO-07, and PO-08, with a combined maximum throughput of 4,050 pounds per hour plastic pellets.

(g) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, brazing equipment, cutting torches, soldering equipment, welding equipment:

(2) Body welding and finishing, identified as WE-02, using resistance welding and grinding , and ~~six (6)~~ MIG welding stations. The **SR station "Stationary Robots" and backup** MIG welding and grinding operations are controlled by cartridge filters.

Insignificant Activities

~~(x)~~**(z)** Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 26 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:

~~(4)~~**(5)** ~~One (1)~~ **Eight (8)** cold cleaner degreaser**s**, identified as ST-02**, MS-02, WE-07, AF-05, VQ-01, PA-27, PO-20 and FAC-176**, located at **designated areas** ~~the stamping area~~.

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

11. Section D.8 conditions have been revised as follows:

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Storage Tanks and Winshield Washer Fluid Fill

Insignificant Activities

(c) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

~~(A) One (1) diesel fuel storage tank for distribution building generator, identified as FAC-88, with a capacity of 300 gallons, equipped with submerged fill.~~

~~(B) Two diesel fuel storage tanks for back-up generators, identified as FAC-91 and FAC-92, each with a capacity of 250 gallons, equipped with submerged fill.~~

~~(C)~~**(A)** Two (2) diesel fuel storage tanks for fire pumps, identified as FAC-93 and FAC-94, each with a capacity of ~~500~~ **300** gallons, each equipped with submerged fill.

~~(D)~~**(B)** ~~One (1)~~ **Three (3)** diesel fuel storage tanks for ~~substation~~ generator**s**, identified as FAC-95**, FAC-177 and FAC-178**, **each** with a capacity of 150 gallons.

~~(x)~~**(z)** Activities with emissions equal to or less than the following thresholds: 5 lb/hr or 26 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) Windshield washer fluid fill operation, with a capacity of 70 units per hour, consisting of the following:

(B) One (1) windshield washer fluid storage tank, identified as FAC-102, located at the tank farm, with a capacity of ~~4,900~~ **2,000** gallons, equipped with submerged fill.

(2) The following tanks, located at the Tank Farm:

(A) One (1) automatic transmission fluid storage tank, identified as FAC-96, with a capacity of ~~15,000~~ **10,000** gallons, equipped with submerged fill.

(B) One (1) antifreeze storage tank, identified as FAC-103, with a capacity of ~~15,000~~ **10,000** gallons, equipped with submerged fill.

~~(C) One (1) diesel fuel storage tank, identified as FAC-90, with a capacity of 3000 gallons, equipped with submerged fill.~~

~~(D)~~**(C)** One (1) brake fluid storage tank, identified as FAC-98, with a capacity of ~~4,000~~ **2,000** gallons, equipped with submerged fill.

~~(E)~~**(D)** One (1) power steering fluid storage tank, identified as FAC-101, with a capacity of ~~8,000~~ **2,000** gallons, equipped with submerged fill.

~~(F)~~**(E)** One (1) manual transmission fluid storage tank, identified as FAC-104, with a capacity of ~~8,000~~ **2,000** gallons, equipped with submerged fill.

~~(G)~~**(F)** One (1) diesel fuel storage tank for yard truck operations, identified as MS-01, with a capacity of ~~4,000~~ **3,000** gallons, equipped with submerged fill.

(3) The following tank, located at the Utility Building:

(A) One (1) diesel fuel storage tank, identified as FAC-90, with a capacity of 2,000 gallons, equipped with submerged fill.

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

12. Section D.9 conditions have been revised as follows:

SECTION D.9 FACILITY OPERATION CONDITIONS

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

Insignificant Activities

(a) Painting Operations:

(10) Plastic Parts Touch-up Booth, identified as PO-17, using dry filters for particulates control and manual application systems.

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

(d) Pursuant to 326 IAC 2-2-3, Best Available Control Technology (PSD BACT), the VOC usage from Plastic Parts Touch-up booth, identified as PO-17, shall be less than 10.0 pounds per day.

D.9.2 PSD BACT for PM and PM10 [326 IAC 2-2]

Pursuant to 326 IAC 2-2, Best Available Control Technology (BACT), the PM and PM10 emissions from the dry filters controlling the Final Repair, identified as PA-12 **and Plastic Parts Touch-up Booth, identified as PO-17**, shall be limited to 0.0015 grains per standard cubic foot (gr/scf) of exhaust air and 98% control efficiency. PM-10 includes filterable and condensible PM 10.

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

D.9.5 Dry Filters Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the Final Repair, identified as PA-12 stack (ID1063) **and Plastic Parts Touch-up Booth, identified as PO-17 stack (ID 2010)** while the repair is in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

D.9.6 Record Keeping Requirements [326 IAC 8-2-2]

(a) To document compliance with Condition D.9.1, 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.9.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(4) The calculated daily VOC emissions from Topcoat in-line repair, identified as PA-09, ~~and~~ Final Repair-Air Dry, identified as PA-13**, and Plastic Parts Touch-up Booth, identified as PO-17**.

13. Section D.3 conditions have been revised as follows:

SECTION D.10 FACILITY OPERATION CONDITIONS – Various Combustion Units

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

(a) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

(B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID 1100.

(C) One (1) E-Coat pre-heat zone, with with a maximum heat input capacity of ~~5.175~~ **3.7** MMBtu/hr, exhausting to ~~one (1)~~ stack ID 1003.

(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of **five oven zones, each with a heat input capacity of 3.7 MMBtu/hr** ~~the following ovens~~, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

~~(i) Oven zone 1, with a heat input capacity of 3.85 million British thermal units per hour (MMBtu/hr).~~

~~(ii) Oven zone 2 with a heat input capacity of 2.75 million British thermal units per hour (MMBtu/hr).~~

~~(iii) Oven zone 3, zone 4, and zone 5, each with a heat input capacity of 5.175 million British thermal units per hour (MMBtu/hr).~~

~~(2) Sealer Deadener Coating Line, identified as PA-03, with a capacity of 73 units per hour, consisting of the following:~~

~~(C) One (1) natural gas-fired Sealer Deadener 2-stage drying oven, which consists of two (2) zones with one (1) 5.175 MMBtu/hr oven on each zone, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.~~

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, ~~each~~ **one** with a maximum heat input capacity of ~~3.85~~ **3.5** MMBtu/hr **and one with a maximum heat input capacity of 2.6 MMBtu/hr**.

(C) One (1) natural gas-fired Primer/Surfacer ~~6~~**5**-stage oven tunnel, which consists of ~~six (6)~~ **five (5)** zones**, oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr** ~~with one (1) 2.75 MMBtu/hr burner on each zone~~, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.

(D) ~~Two (2) surfacer natural gas-fired oven fresh air, identified as #1 and #2, each with a maximum heat input of 2.75 MMBtu/hr.~~ **One (1) oven exit hood exhaust, exhausting to stack ID 1021.**

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of ~~2.75~~ **2.6** MMBtu/hr, exhausting to stack ID 1033 and stack **ID** 1044.

(D) One (1) natural gas-fired Topcoat ~~3~~**5**-stage oven tunnel, ~~for Topcoat Line #1~~ which consists of ~~three (3)~~ **five (5)** zones**, oven zone #1 with a heat input capacity of 3.5 MMBtu/hr, oven zone #2 with a heat input capacity of 2.6 MMBtu/hr and oven zones #3, #4, and #5, each with a heat input capacity of 1.7 MMBtu/hr** ~~with one (1) 2.75 MMBtu/hr burner on each zone~~, controlled by one (1) RTO, identified as RTO #~~1~~**2** with stack ID~~1100~~ **1101**.

~~(E) One (1) natural gas-fired Topcoat 3-stage oven tunnel, for Topcoat Line #2 which consists of three (3) zones with one (1) 2.75 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.~~

(F) ~~Two (2) natural gas-fired oven fresh air, for Topcoat Line #1 and Topcoat Line #2, each with a maximum heat input of 2.75 MMBtu/hr.~~ **One (1) oven exit hood exhaust, exhausting to stack ID1037.**

~~(H)~~**(G)** Topcoat on-line repair, **identified as PA-07,** which includes:

(iii) One(1) natural gas-fired repair oven, with a maximum heat input capacity of ~~1.65~~ **2.6** MMBtu/hr, exhausting to stack ID 1058.

~~(I)~~**(H)** Air makeup units as follows:

(i) Two (2) natural gas-fired air makeup units, for the Topcoat Lines #1 and #2 basecoat booths, each equipped with a two-stage burner, each with a combined maximum heat input capacity of ~~11~~ **9.2** MMBtu/hr.

(ii) Two (2) natural gas-fired air makeup units, for Topcoat Lines #1 and #2 clearcoat booths, each equipped with a two-stage burner, each with a combined maximum heat input capacity of ~~9~~ **5.8** MMBtu/hr.

(iii) One (1) natural gas-fired air makeup unit, for the topcoat in-line repair operations, equipped with a two-stage burner, with a combined maximum heat input capacity of ~~16~~ **12.2** MMBtu/hr.

(8) One (1) natural gas-fired air makeup unit, with a maximum heat input capacity of ~~14.00~~ **20.0** MMBtu/hr.

(9) One (1) natural gas-fired air makeup unit, with a maximum heat input capacity of 8.0 MMBtu/hr, identified as PA-22.

(10) One (1) natural gas fired air makeup unit, with a maximum heat input capacity of 5.0 MMBtu/hr, identified as PA-23.

~~(9)~~**(11)** ~~Four (4)~~ **Two (2)** natural gas-fired HVAC units, identified as **PA-24 and PA-25** ~~FAC-21, FAC-22, FAC-23, and FAC-24~~**,each** with ~~respective~~ maximum heat input capacit**y**~~ies~~ of ~~16.00~~ **13.0** MMBtu/hr.~~16.00 MMBtu/hr, 14.00 MMBtu/hr and 3.00 MMBtu/hr.~~

(12) One (1) natural gas-fired HVAC unit, with a maximum heat input capacity of 8.0 MMBtu/hr, identified as PA-26.

(b) Plastics Operations:

(1) ~~Fascia/Bumper~~ **Plastic Parts** Coating Line, identified as PO-02, with a capacity of 120 hangers per hour, consisting of the following:

~~(D) One (1) primer flashoff zone with one (1) natural gas-fired heater, with a maximum heat input capacity 2.75 MMBtu/hr.~~

~~(F) One (1) basecoat flashoff area, with one (1) natural gas-fired heater, with a maximum heat input capacity 2.75 MMBtu/hr.~~

~~(G)~~**(E)** One clearcoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water wash or oil emulsion system to control particulate overspray, **and VOC emissions** controlled by one (1) RTO, with a maximum heat input capacity of 14.0 MMBtu/hr, identified as RTO #3 with stack ID 2029.

~~(I)~~**(G)** One (1) ~~clearcoat~~ **plastic parts** oven **tunnel which consists of two (2) zones with one (1) 2.6 MMBtu/hr burner on each zone,** ~~with a maximum heat input capacity of 3.875 MMBtu/hr~~ controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

~~(J)~~**(H)** ~~Two (2)~~ **One (1)** natural gas-fired air makeup unit~~s~~, ~~each~~ equipped with a two-stage burner, ~~each~~ with a combined maximum heat input capacity of 19.0 MMBtu/hr.

~~(2) Instrument Panel Painting Line, identified as PO-03, with a capacity of 120 hangers per hour, consisting of the following:~~

~~(C) One (1) curing oven, with a maximum heat input capacity of 0.88 MMBTU/hr, exhausting to stack 2011.~~

~~(6) One (1) natural gas-fired HVAC unit, identified as FAC-87, with a maximum heat input capacity of 13.00 MMBtu/hr.~~

(e) Two (2) diesel fired ~~back-up~~ **emergency** generators, identified as FAC-84 and FAC-85, each with a rated capacity of 500 kilowatts (kw). ~~equal to or less than 499 horsepower (HP).~~

(f) One diesel fired back-up generator, identified as FAC-86, with a rated capacity equal to or less than ~~250~~ **100** kilowatts (kw) ~~per hour (kw/hr)~~.

Insignificant Activities

(b) 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) ~~Two~~ **One (1)** natural gas-fired hot water heater~~s~~ (**FAC-110** ~~FAC-111 and FAC-112~~) for the purpose of supplying hot water to the café kitchen, with a combined maximum heat input capacity of ~~0.48~~ **0.50** MMBtu/h.

(2) Four (4) natural gas-fired hot water generators, associated with PA-20, located in the body painting area, with a combined maximum heat input capacity of 24.5 MMBtu/hr.

~~(3) One natural gas-fired immersion heater (PO-13) located in the plastics painting area, with a maximum heat input capacity of 5.30 MMBtu/hr.~~

~~(4)~~**(3)** ~~Air makeup units(A) One (1) natural gas-fired air makeup unit for the E-Coat sanding and inspection booth (PA-04), equipped with a two-stage burner, with a maximum heat input capacity of 10 MMBtu/hr.~~

~~(B)~~ One (1) natural gas-fired air makeup unit for the Primer/Surfacer sanding and inspection booth (PA-06), ~~equipped with a two-stage burner,~~ with a maximum heat input capacity of ~~10~~ **6.4** MMBtu/hr.

~~(C) One (1) natural gas-fired air makeup unit, for the Blackout/Cavity Wax coating booth (PA-11) and the Final Repair (PA-12), with a maximum heat input capacity of 7 MMBtu/hr.~~

~~(D) One (1) natural gas-fired air makeup unit, for the Instrument Panel Painting Line (PO-03), with a maximum heat input capacity of 4.00 MMBtu/hr.~~

~~(5)~~**(4)** Twenty-eight (28) natural gas-fired space heaters (FAC-53 through FAC-80), with a combined maximum heat input capacity of ~~5.50~~ **3.4** MMBtu/hr.

~~(6)~~**(5)** Natural gas-fired HVAC units (FAC-01 through **FAC-07, FAC-11 through** FAC-20 and ~~FAC-24~~ **FAC-26** through ~~FAC-52~~ **FAC-30, FAC-32, FAC-35 through FAC-37, FAC-39 through FAC-41, FAC-43 through FAC-52, FAC-146, FAC-147 and FAC-170**)**,** with a combined maximum heat input capacity of ~~112.3~~ **87.5** MMBtu/hr.

(6) Forty three (43) natural gas-fired space heaters (FAC-117 through FAC-130, FAC-133 through FAC-139 and, FAC-148 through FAC-150 and FAC-151 through FAC-169), with a combined maximum heat input capacity of 6.9 MMBtu/hr.

(7) Four (4) natural gas-fired HVAC units (FAC-116, FAC-131, FAC-132 and FAC-140), with a combined maximum heat input capacity of 2.2 MMBtu/hr.

(s) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower.

(1) One (1) substation emergency generator, identified as FAC-81, with a capacity of ~~75~~ **81** kilowatts **(kw)** ~~per hour~~.

(2) One (1) Consolidation Center emergency generator, identified as FAC-89, with a capacity rating of 81 kilowatts (kw).

(3) One (1) Credit Union building emergency generator, identified as FAC-115, with a capacity of 81 kilowatts (kw).

(u) Emergency generators as follows: Gasoline generators not exceeding 110 horsepower.

(1) Two (2) emergency generators, identified as FAC-145 and FAC-175, each with a capacity of 3.0 kilowatts (kw).

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

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

D.10.1 Prevention of Significant Deterioration (PSD) CO Minor Limit [326 IAC 2-2]

The CO emissions from all natural gas combustion units in this SECTION D.10 shall not exceed ~~134~~ **188.5** pounds per million cubic feet (lb/MMCF), and the total natural gas fuel usage shall be limited to ~~1,432~~ **1,030** million cubic feet (~~1,432,000~~ **1,000,000** decatherms) per 12 consecutive month period with compliance determined at the end of each month. Compliance with this limit in conjunction with the PTE of ~~four (4)~~ **seven (7)** emergency generators, identified as FAC-81, FAC-84, FAC-85, ~~and~~ FAC-86**, FAC-89, FAC-115, FAC-145** and two (2) emergency fire pumps, identified as FAC-82 and FAC-83, limits the

CO emissions to less than 100 tons per year, which renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable for CO emissions.

D.10.2 Prevention of Significant Deterioration (PSD) – Best Available Control Technology for Particulate Emissions (PM) and Nitrogen Oxides (NOx) [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the generators, identified as FAC-81 and FAC-84 through FAC-86, and the fire pumps, identified as FAC-82 and FAC-83, shall be as follows:

Emission Unit IDs	Emission Limitation		
	Operating Hours per year	NOx ~~(lb/MMBTU)~~	PM ~~(lb/MMBTU)~~
FAC-81 Substation Generator (~~75 KW~~ **81 kw**), **FAC-89 Consolidation Center Generator (81 kw), FAC-115 Credit Union Generator (81 kw)**	500	3 g/hp-hr Use of Ultra Low Sulfur Diesel (ULSD)	0.22 g/hp-hr Use of ULSD
FAC-82, FAC-83: Fire Pumps (~~400~~ **183**~~H~~**h**p each)	500	7.8 g/hp-hr Use of ULSD	0.4 g/hp-hr Use of ULSD
FAC-84, FAC-85: **Emergency** ~~Back-up~~ Generators (~~499 Hp~~ **500 kw**, each)	500	4.5 g/hp-hr Use of ULSD	0.15 g/hp-hr Use of ULSD
FAC-86, ~~250~~ **100** KW backup generator	500	3 g/hp-hr Use of ULSD	~~0.15~~ **0.22** g/hp-hr Use of ULSD
FAC-145, 3 kw backup gasoline generator	**500**	**9 g/hp-hr**	
FAC-175, 3 kw backup gasoline generator	**500**	**9 g/hp-hr**	

Note: ULSD (Ultra Low Sulfur Diesel)

(b) Pursuant to 326 IAC 2-2-3, the Best Available Control Technology (PSD BACT) for the Natural Gas Combustion (small heaters < 15 MMBtu/hr maximum heat input capacity), shall be as follows:

~~Emission Unit IDs~~	~~Emission Limitation (lb/MMBTU)~~	
	~~NOx~~	~~PM~~
~~FAC-43 through FAC-50~~	~~0.73 lb NOX/MMBtu~~	~~0.0075 lb PM/MMBtu Natural gas only~~
~~FAC-02 through FAC-10; FAC13 through FAC-15, FAC-17 through FAC-20, FAC-26 through FAC-32, FAC-35, FAC-36~~	~~0.02 lb NOX/MMBtu~~	~~0.0075 lb PM/MMBtu Natural gas only~~
~~FAC-33, FAC-34, FAC-37 through FAC-42, FAC-51, FAC-52~~	~~0.04 lb NOX/MMBtu~~	~~0.0075 lb PM/MMBtu Natural gas only~~

~~PA-04 (E-Coat inspection ASH), PA-05 (Surfacer ASH), PA-06 (Surfacer Inspection ASH), PA-07 (Basecoat #1 & #2 ASH, Clearcoat #1 & #2 ASH, and Repair ASH), PA Working Area ASH, PA-11 (W/H Black & F/Repair ASH), PO-02 (ASH) , PO-03 (ASH), FAC-87 (PO HVAC), FAC-21 through FAC-24 (PA HVAC), FAC-01, FAC-11, FAC-12, FAC-16~~	~~0.06 lb NOX/MMBtu~~	~~0.0075 lb PM/MMBtu Natural gas only~~
~~PA-02, PA-03, PA-05, PA-07, PO-02 and PO-03 (burners for heated flash areas and bake ovens), FAC-25 (Paint Mix HVAC)~~	~~0.02 lb NOX/MMBtu~~	~~0.0075 lb PM/MMBtu Natural gas only~~
~~PA-20 (process water heaters)~~	~~0.04 lb NOX/MMBtu~~	~~0.0075 lb PM/MMBtu Natural gas only~~
~~FAC-53 through FAC-80 (unit heaters), FAC-111 and FAC-112 (café water heaters), PO-13, and the RTOs~~	~~0.10 lb NOX/MMBtu~~	~~0.0075 lb PM/MMBtu Natural gas only~~

Emission Unit IDs	**Emission Limitation (lb/MMBTU)**	
	NOx	**PM**
FAC-01 through FAC-07, FAC-11 through FAC-19, FAC-35, FAC-116, PA-05 air supply house, PA-06 air supply house, PA-07 air supply house, PA-21 through PA-26, PO-02 air supply house	**0.08 lb NOX/MMBtu**	**0.0075 lb PM/MMBtu Natural gas only**
FAC-20, FAC-26, FAC-28, FAC-29, FAC-32, FAC-37, FAC-41, FAC-43 through FAC-52, FAC-140, FAC-146, FAC-147, PA-20	**0.04 lb NOX/MMBtu**	**0.0075 lb PM/MMBtu Natural gas only**
FAC-27, FAC-30, PA-02 bake oven, PA-05 bake oven zones 3, 4 & 5, PA-07 repair oven, PO-02 bake oven zone 2	**0.02 lb NOX/MMBtu**	**0.0075 lb PM/MMBtu Natural gas only**
PA-05 flash off heaters 1 and 2, PA -05 bake oven zones 1 and 2, PA-07 basecoat flash off heaters 1 and 2, PA-07 topcoat bake oven zones 1 and 2, PO-02 bake oven zone 1	**0.048 lb NOX/MMBtu**	**0.0075 lb PM/MMBtu Natural gas only**
FAC-36, FAC-39, FAC-40, FAC-53 through FAC-80, FAC-110, FAC-117 through FAC-139, FAC-148 through FAC-170, 3 regenerative thermal oxidizers	**0.10 lb NOX/MMBtu**	**0.0075 lb PM/MMBtu Natural gas only**

D.10.3 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the following facilities shall be limited to 0.28 pound per million British thermal units (lb/mmBtu):

- FAC~~-02~~ **20** ~~through FAC-10~~, FAC~~-13~~ **26** through FAC~~-15~~ **30**, FAC~~-17~~**32** ~~through FAC-20~~, FAC~~-26~~ **35** through FAC~~-42~~ **37**, ~~and~~ FAC~~-51~~ **39** through FAC~~-80~~ **41, FAC-50 through FAC-80, FAC-116 throgh FAC-144**;
- ~~PA-03,~~ PA-05, PA-07,and PO-02 ~~and PO-03~~ (burners for heated flash areas and bake ovens);
- PA-20 (process water heaters) and the café water heater~~s~~ (FAC~~-111~~**110**~~, FAC-112~~).

The limit shall be established using the following equation:

Pt = 1.09/(Q^0.26)

Where: 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)
Q = 175.14 mmBtu heat input

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

D.10.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [326 IAC 2-2]

Within sixty (60) days after achieving maximum capacity but no later than one hundred and eighty (180) days after initial startup of the combustion sources in this SECTION D.10, the Permittee shall conduct performance tests to measure the NOx, utilizing methods as approved by the Commissioner for the following sources:

(a) One RTO
~~(b) Sealer Oven (PA-03)~~
~~(c)~~**(b)** One ASH rated at 19 MMBtu/hr ~~(PO-03)~~; and
~~(d)~~**(c)** Any one (1) of the following ASH units:
~~(1) E-Coat Inspection ASH (10 MMBtu/hr) (PA-04)~~
~~(2) Surfacer Inspection ASH (10 MMBtu/hr) (PA-06)~~
~~(3)~~**(1)** Basecoat #1 or #2 ASH each with ~~11~~**9.2** MMBtu/hr (PA-07)

The NOx testing for the RTOs shall be repeated at least once every two and half (2.5) years from the date of the most recent valid compliance demonstration. Testing of the RTOs shall be conducted such that every seven and half (7.5) years each of the three (3) RTOs is tested.

14. Section D.11 conditions have been revised as follows:

SECTION D.11 FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

(k) Noncontact cooling tower systems with forced and/or induced draft cooling tower system not regulated under a NESHAP.

~~(2) One (1) forced draft air compressor cooling tower, identified as FAC-106, with a capacity of 2,370 gallons per minute.~~
~~(3)~~**(2)** One (1) forced draft ~~PO/ST~~ **air compressor** cooling tower, identified as FAC-107, with a capacity of ~~877~~ **940** gallons per minute.

~~(v)~~**(w)** Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(1) One (1) wheelabrator unit, identified as PA-15.

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

15. Section E.1 conditions have been revised as follows:

SECTION E.1 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID 1100.

(C) One (1) E-Coat pre-heat zone, with a maximum heat input capacity of ~~5.175~~ **3.7** MMBtu/hr, exhausting to ~~one (1)~~ stack ID 1003.

(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of **five oven zones, each with a heat input capacity of 3.7 MMBtu/hr** ~~the following ovens~~, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

~~(i) Oven zone 1, with a heat input capacity of 3.85 million British thermal units per hour (MMBtu/hr).~~
~~(ii) Oven zone 2 with a heat input capacity of 2.75 million British thermal units per hour (MMBtu/hr).~~
~~(iii) Oven zone 3, zone 4, and zone 5, each with a heat input capacity of 5.175 million British thermal units per hour (MMBtu/hr).~~

(E) One (1) cooling tunnel, exhausting to ~~one (1)~~ stack ID 1006.

Under 40 CFR 60, Subpart MM, this operation is considered a prime coat operation.

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(A) One (1) Primer/Surfacer spray coating booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system and dry filters to control particulate overspray, exhausting to ~~three (3)~~ stack~~s~~ ID 1014 and~~,~~ **stack** ID 1015~~, and ID1016~~.

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, ~~each~~ **one** with a maximum heat input capacity of ~~3.85~~ **3.5** MMBtu/hr **and one with a maximum heat input capacity of 2.6 MMBtu/hr**.

(C) One (1) natural gas-fired Primer/Surfacer ~~6~~**5**-stage oven tunnel, which consists of ~~six (6)~~**five (5)** zones**, oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr** ~~with one (1) 2.75 MMBtu/hr burner on each zone~~, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

(D) ~~Two (2) surfacer natural gas-fired oven fresh air, identified as #1 and #2, each with a maximum heat input of 2.75 MMBtu/hr~~. **One oven exit hood exhaust, exhausting to stack ID 1021.**

(E) One (1) cooling tunnel, exhausting to ~~one (1)~~ stack ID 1022.

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of ~~2.75~~ **2.6** MMBtu/hr, exhausting to stack ID 1033 and stack **ID** 1044.

(C) Two (2) clearcoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems. The automatic zones use water/oil emulsion wash systems to control particulate overspray and the manual zones use dry filters. The manual zones are cascaded to the automatic zones, and the automatic zones are controlled by one (1) RTO, identified as RTO #2 with stack ID1101.

(D) One (1) natural gas-fired Topcoat ~~3~~**5**-stage oven tunnel, ~~for Topcoat Line #1~~ which consists of ~~three (3)~~ **five (5)** zones**, oven zone #1, with a heat input of 3.5 MMBtu/hr, oven zone #2, with a heat input capacity of 2.6 MMBtu/hr and oven zones #3, #4 and #5, each with a heat input capacity of 1.7 MMBtu/hr** ~~with one (1) 2.75 MMBtu/hr burner on each zone~~, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.

~~(E) One (1) natural gas-fired Topcoat 3-stage oven tunnel, for Topcoat Line #2 which consists of three (3) zones with one (1) 2.75 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.~~

~~(F) Two (2) natural gas-fired oven fresh air, for Topcoat Line #1and Topcoat Line #2, each with a maximum heat input of 2.75 MMBtu/hr.~~

~~(G)~~**(E)** ~~Two (2)~~ **One (1)** cooling tunnel~~s~~, exhausting to ~~one (1)~~ stack ID 1041 ~~and ID 1052~~.

(F) One (1) oven exit hood exhaust, exhausting to STACK ID 1037.

Under 40 CFR 60, Subpart MM, this operation is considered a Topcoat operation.

16. Section E.2 conditions have been revised as follows:

SECTION E.2 FACILITY OPERATION CONDITIONS

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

~~(d)~~**(e)** Two (2) diesel fired ~~back-up~~ **emergency** generators, identified as FAC-84 and FAC-85, each with a rated capacity **of 500 kilowatts (kw).** ~~equal to or less than 499 horsepower (HP).~~

Under 40 CFR 60, Subpart IIII, these units are considered model year 2007 or later stationary internal combustion engines.

~~(e)~~**(f)** One diesel fired back-up generator, identified as FAC-86, with a rated capacity equal to or less than ~~250~~ **100** kilowatt**s (kw)**~~per hour~~ ~~(Kw/hr)~~.

Under 40 CFR 60, Subpart IIII, this unit is considered a model year 2007 or later stationary internal combustion engine.

Insignificant Activites

(s) Emergency generators as follows: Diesel generators not exceeding 1600 horsepower.

(1) ~~One (1)~~ **Three (3)** ~~substation~~ emergency generator**s**, identified as FAC-81**, FAC-89 and FAC-115**, with a capacity of 75 kilowatt**s (kw)** ~~per hour~~**.**

Under 40 CFR 60, Subpart IIII, this unit is considered a model year 2007 or later emergency stationary internal combustion engine.

17. Section E.3 conditions have been revised as follows:

SECTION E.3 FACILITY OPERATION CONDITIONS

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

(b) Plastics Operations:

(1) ~~Fascia/Bumper~~ **Plastic Parts** Coating Line, identified as PO-02, with a capacity of 120 hangers per hour, consisting of the following:

~~(D) One (1) primer flashoff zone with one (1) natural gas-fired heater, with a maximum heat input capacity 2.75 MMBtu/hr.~~

~~(E)~~**(D)** One (1) basecoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray. If waterborne basecoat is utilized, the basecoat spray booth will exhaust to ~~two (2)~~ stack~~s with~~ ID 2003 and **stack** ID 2004. If solventborne basecoat is utilized, the basecoat spray booth will be controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

~~(F) One (1) basecoat flashoff area, with one (1) natural gas-fired heater, with a maximum heat input capacity 2.75 MMBtu/hr.~~

~~(G)~~**(E)** One clearcoat spray booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system to control particulate overspray, controlled by one (1) RTO, with a maximum heat input capacity of 14 MMBtu/hr, identified as RTO #3 with stack ID 2029.

~~(H)~~**(F)** One (1) clearcoat flashoff area.

~~(I)~~**(G)** One (1) ~~clearcoat~~ **plastic parts** oven **tunnel which consists of two zones with one (1) 2.6 MMBtu/hr burner on each zone,** ~~with a maximum heat input capacity of 3.875 MMBtu/hr~~ controlled by one (1) RTO, identified as RTO #3 with stack ID 2029.

Under 40 CFR 63, Subpart PPPP, this operation is considered a new general use coating operation.

~~(2) Instrument Panel Painting Line, identified as PO-03, with a capacity of 125 hangers per hour, consisting of the following:~~

~~(A) One (1) spray booth, utilizing High Volume Low Pressure (HVLP) application system, using a dry filter to control particulate overspray, exhausting to stack 2010.~~
~~(B) One (1) flashoff tunnel.~~
~~(C) One (1) curing oven, with a maximum heat input capacity of 0.88 MMBTU/hr, exhausting to stack 2011.~~

~~(3) Miscellaneous cleaning and purge operation – plastics painting, consisting of the following:~~

~~(B) One (1) virgin purge solvent storage tank, identified as PO-09, located outside the plastics department, with a capacity of 7,000 gallons.~~
~~(C) One (1) spent purge solvent storage tank, identified as PO-10, located outside the plastics department, with a capacity of 7,000 gallons.~~

~~Under 40 CFR 63, Subpart PPPP, this operation is considered a new general use coating operation.~~

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

18. Section E.4 conditions have been revised as follows:

SECTION E.4 FACILITY OPERATION CONDITIONS

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

(a) Body Painting Operations:

(1) Electrodeposition (E-Coat) Coating Line, identified as PA-02, with a capacity of 72 units per hour, consisting of the following:

(B) One (1) Electrodeposition coating dip tank, rinse stages and E-Coat oven controlled by one (1) natural gas-fired regenerative thermal oxidizer (RTO), with a maximum heat input capacity of 14 million British thermal units per hour (MMBtu/hr), identified as RTO #1 with stack ID1100.

(C) One (1) E-Coat pre-heat zone, with a maximum heat input capacity of ~~5.175~~ **3.7** MMBtu/hr, exhausting to ~~one (1)~~ stack ID 1003.

(D) One (1) natural gas-fired E-coat 5-stage oven tunnel, which consists of **five oven zones, each with a heat input capacity of 3.7 MMBtu/hr** ~~the following ovens~~, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

~~(i) Oven zone 1, with a heat input capacity of 3.85 million British thermal units per hour (MMBtu/hr).~~

~~(ii) Oven zone 2 with a heat input capacity of 2.75 million British thermal units per hour (MMBtu/hr).~~

~~(iii) Oven zone 3, zone 4, and zone 5, each with a heat input capacity of 5.175 million British thermal units per hour (MMBtu/hr).~~

(2) Sealer Deadener Coating Line, identified as PA-03, with a capacity of 73 units per hour, consisting of the following:

(A) One (1) automatic and manual sealer deadener application area **and**,~~ exhausting to one stack ID 1007.~~

~~(B)~~ **o**~~O~~ne (1) sound deadener booth, using airless spray application system, exhausting to ~~one~~ stack ID ~~1008~~**1007**.

~~(C) One (1) natural gas-fired Sealer Deadener 2-stage drying oven, which consists of two (2) zones with one (1) 5.175 MMBtu/hr oven on each zone, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.~~

(~~D) One (1) cooling tunnel, exhausting to one (1) stack ID1011.~~

(3) Primer/Surfacer Coating line, identified as PA-05, with a capacity of 80 units per hour, consisting of the following:

(A) One (1) Primer/Surfacer spray coating booth, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems, using water/oil emulsion wash system and dry filters to control particulate overspray, exhausting to ~~three (3)~~ stack~~s~~ ID 1014~~,~~ **and stack** ID 1015~~, and ID1016~~.

(B) One (1) Primer/Surfacer flashoff area, with two (2) natural gas-fired heaters, ~~each~~ **one** with a maximum heat input capacity of ~~3.85~~ **3.5** MMBtu/hr **and one with a maximum heat input capacity of 2.6 MMBtu/hr**.

(C) One (1) natural gas-fired Primer/Surfacer ~~6~~**5**-stage oven tunnel, which consists of ~~six (6)~~ **five (5)** zones**, oven zones #1, #2 and #5, each with a heat input capacity of 2.6 MMBtu/hr and oven zones #3 and #4, each with a heat input capacity of 1.7 MMBtu/hr** ~~with one (1) 2.75 MMBtu/hr burner on each zone~~, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.

(D) ~~Two (2) surfacer natural gas-fired oven fresh air, identified as #1 and #2, each with a maximum heat input of 2.75 MMBtu/hr.~~ **One (1) oven exit hood exhaust, exhausting to one (1) stack ID 1021.**

(E) One (1) cooling tunnel, exhausting to ~~one (1)~~ stack ID 1022.

(4) Topcoat Coating Operation, identified as PA-07, with two (2) Topcoat Lines #1 and #2, with a total capacity of 88 units per hour, consisting of the following:

(B) Two (2) basecoat flashoff areas, each with one (1) natural gas-fired heater, each with a maximum heat input capacity of ~~2.75~~ **2.6** MMBtu/hr, exhausting to stack ID 1033 and stack **ID** 1044.

(C) Two (2) clearcoat spray booths, utilizing High Volume Low Pressure (HVLP) and electrostatic bell application systems. The automatic zones use water wash systems to control particulate overspray and the manual zones use dry filters. The manual zones are cascaded to the automatic zones, and the automatic zones are controlled by one (1) RTO, identified as RTO #2 with stack ID1101.

(D) One (1) natural gas-fired Topcoat ~~3~~**5**-stage oven tunnel, ~~for Topcoat Line #1~~ which consists of ~~three (3)~~ **five (5)** zones**, oven zone #1 with a heat input capacity of 3.5 MMBtu/hr, oven zone #2 with a heat input capacity of 2.6 MMBtu/hr and oven zones #3, #4 and #5, each with a heat input capacity of 1.7 MMBtu/hr** ~~with one (1) 2.75 MMBtu/hr burner on each zone~~, controlled by one (1) RTO, identified as RTO #1 with stack ID 1100.

~~(E) One (1) natural gas-fired Topcoat 3-stage oven tunnel, for Topcoat Line #2 which consists of three (3) zones with one (1) 2.75 MMBtu/hr burner on each zone, controlled by one (1) RTO, identified as RTO #1 with stack ID1100.~~

~~(F) Two (2) natural gas-fired oven fresh air, for Topcoat Line #1and Topcoat Line #2, each with a maximum heat input of 2.75 MMBtu/hr.~~

~~(G)~~**(E)** ~~Two (2)~~ **One (1)** cooling tunnel~~s~~, exhausting to ~~one (1)~~ stack ID 1041 ~~and ID 1052~~.

(F) One oven exit hood exhaust, exhausting to stack ID 1037.

~~(H)~~**(G)** Topcoat on-line repair, identified as PA-07 which includes:

(iii) One(1) natural gas-fired repair oven, with a maximum heat input capacity of ~~1.65~~ **2.6** MMBtu/hr, exhausting to stack ID 1058.

(6) Miscellaneous cleaning and purge operation – paint operations, consisting of the ~~following:~~
~~(A)~~ ~~P~~ **p**urge and clean-up solvent usage and recovery system, identified as PA-14, including virgin solvent distribution, day tanks, **small** portable containers **including containers that meet the definition of cold cleaners**, and spent solvent recovery.

~~(B) One (1) virgin purge solvent storage tank, identified as PA-18, located outside the paint department, with a capacity of 7,000 gallons.~~

~~(C) One (1) spent purge solvent storage tank, identified as PA-19, located outside the paint department, with a capacity of 7,000 gallons.~~

19. Condition D.1.1 and the Quarterly Report have been revised to change the VOC limit as follows:

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

Pursuant to 326 IAC 2-2-3 (BACT), the proposed automobile and light-duty truck assembly plant shall be limited as follows:

(b) The total VOC usage from all surface coating operations; E-Coat Line (PA-02), Sealer/Deadener (PA-03), Primer/Surfacer (PA-05), Topcoat Coating Line and On-Line Repair (PA-07), Blackout/Cavity Wax Coating Line (PA-11), and ~~Fascia/Bumper~~ **Plastic Parts**, shall be limited such that the total VOC emissions shall not exceed ~~322.7~~ **330.2** tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with paragraph (a) of this condition is also necessary to render PSD not applicable for CO and SO_2 emissions.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name: Honda Manufacturing of Indiana, LLC
Source Address: ~~Intersection of I-74 and~~ **2755** N. Michigan Avenue~~, at Exit 132~~, Greensburg, IN 47240
Mailing Address: Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, OH 43040
PSD/Part 70 Permit No.: 031-23360-00026
Facility: E-Coat Line (PA-02), Sealer/Deadener (PA-03), Primer/Surfacer (PA-05), Topcoat Coating Line and On-Line Repair (PA-07), Blackout/Cavity Wax Coating Line (PA-11), and Fascia/Bumper,
Parameter: VOC
Limit: Shall not exceed ~~322.7~~ **330.2** tons VOC per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: ___________YEAR_____________

Month	VOC Emissions This Month (tons)	VOC Emissions for Past 11 Months (tons)	VOC Emissions for 12 Month Period (tons)
Month 1			
Month 2			
Month 3			

Submitted by: ____

Title / Position: ____

Signature: ____

Date: ____

Phone: ____

Attach a signed certification to complete this report.

Attach a signed certification to complete this report.

20. Condition D.10.1and the Quarterly Report have been revised to change CO limit as follows:

D.10.1 Prevention of Significant Deterioration (PSD) CO Minor Limit [326 IAC 2-2]

The CO emissions from all natural gas combustion units in this SECTION D.10 shall not exceed ~~134~~ **188.5** pounds per million cubic feet (lb/MMCF), and the total natural gas fuel usage shall be limited to ~~1,432~~ **1,030** million cubic feet (~~1,432,000~~ **1,000,000** decatherms) per 12 consecutive month period with compliance determined at the end of each month. Compliance with this limit in conjunction with the PTE of ~~four (4)~~ **seven (7)** emergency generators, identified as FAC-81, FAC-84, FAC-85, ~~and~~ FAC-86**, FAC-89, FAC-115, FAC-145** and two (2) emergency fire pumps, identified as FAC-82 and FAC-83, limits the CO emissions to less than 100 tons per year, which renders the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable for CO emissions.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section

Part 70 Quarterly Report

Source Name:	Honda Manufacturing of Indiana, LLC
Source Address:	~~Intersection of I-74 and~~ **2755** N. Michigan Avenue~~, at Exit 132~~, Greensburg, IN 47240
Mailing Address:	Honda of America Manufacturing, Inc., 24000 Honda Parkway, Marysville, Ohio 43040
PSD/Part 70 Permit No.:	031-23360-00026
Facility:	Natural gas combustion sources in SECTION D.10
Parameter:	VOC
Limit:	~~134~~ **188.5** pounds of CO per MMCF of natural gas and ~~1,432~~ **1,030** million cubic feet (~~1,432,000~~ **1,000,000** decatherms) of natural gas 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)	Natural Gas Usage for 12 Month Period (MMCF)
1			
2			
3			

Submitted by: ____

Title / Position: ____

Signature: ____

Date: ____

Phone: ____

Attach a signed certification to complete this report.

21. Condition D.10.5(b) has been revised as follows to require the Permittee maintain on file vendors guarantees and/or certifications for NOx emissions on all emission units specified on condition D.10.2, except space heating units that are used for comfort, where guarantees and/or certifications are not readily available:

D.10.5 Record Keeping Requirements

(a) To document compliance with Condition D.10.1, the Permittee shall maintain records of the total natural gas usage from all combustion units in this SECTION.

(b) To document compliance with Condition D.10.2, the Permittee shall maintain on file vendors guarantees and/or certifications for NOx emissions**, excluding space heaters used for comfort, where guarantees and/or certifications are not readily available.**

Conclusion and Recommendation

The construction and operation of this new automobile and light-duty truck assembly plant shall be subject to the conditions of the attached PSD/Part 70 Operating permit. The staff recommends to the Commissioner that this Significant Permit Modification No.: 031-24706-00026 and Significant Source Modification No.: 031-24760-00026 be approved.

Plant Summary

Unit ID	Emission Source	Emissions (tons/year)											
			PM									HAP	
		VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
POINT													
All	Material Service (MS)	0.18	-	-	-	-	-	-	-	-	-	0.00092	-
All	Stamping (ST)	0.18	3.20	0.40	0.40	0.40	-	-	-	-	-	0.00092	-
All	Welding (WE)	9.21	1.95	1.95	1.95	1.95	-	-	-	-	-	0.00692	-
All	Assembly (AF)	25.49	-	-	-	-	-	-	-	-	-	0.39	-
All	Paint (PA)	306.72	2.43	2.43	2.43	2.43	-	-	-	-	-	25.02	-
All	Plastics (PO) (w/b Base)	146.32	4.12	4.12	4.12	4.12	-	-	0.09	-	0.07	22.71	0.00
	Plastics (PO) (s/b Base)	105.84	4.35	4.35	4.35	4.35	-	-	0.09	-	0.07	14.00	0.00
All	Facilities (FAC)	12.54	12.45	8.95	7.32	12.45	-	6.13	55.70	0.41	96.89	5.00	0.003
Total	Total with Plastics w/b Base	500.65	24.15	17.85	16.22	21.35	-	6.13	55.78	0.41	96.96	53.13	0.003
Total	Total with Plastics s/b Base	460.17	24.38	18.08	16.45	21.58	-	6.13	55.78	0.41	96.96	44.42	0.003

MATERIAL SERVICE DEPARTMENT EMISSION INVENTORY

Unit ID	Emission Source	Associated Stack/Vent IDs	Emissions (tons/year)											
				PM									HAP	
			VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
POINT														
MS-01	3000 gallon diesel fuel tank	4018	Inc w/FAC											
MS-02	MS Cold Cleaner		0.184	-	-	-	-	-	-	-	-	-	0.00092	-
TOTAL	MATERIAL SERVICE DEPARTMENT		0.18	-	-	-	-	-	-	-	-	-	0.00	-

STAMPING DEPARTMENT EMISSION INVENTORY

Unit ID	Emission Source	Associated Stack/Vent IDs	Emissions (tons/year)											
				PM									HAP	
			VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
POINT														
ST-01	Tandem Press	4000	-		-	-	-	-	-	-	-	-	-	-
ST-02	ST cold cleaner	4000	0.18		-	-	-	-	-	-	-	-	0.00092	-
ST-03	ST Die Maintenance	4000	-	1.60	0.20	0.20	0.20	-	-	-	-	-	-	-
ST-04	ST Parts Repair	4000	-	1.60	0.20	0.20	0.20	-	-	-	-	-	-	-
TOTAL	STAMPING DEPARTMENT	4000	0.18	3.20	0.40	0.40	0.40						0.00092	-

WELD DEPARTMENT EMISSION INVENTORY

Unit ID	Emission Source	Associated Stack/Vent IDs	Emissions (tons/year)											
				PM									HAP	
			VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
POINT														
WE-01	Weld Sealer Process	4001	3.91	-	-	-	-	-	-	-	-	-	0.006	-
WE-02	Body Welding and Finishing	4001	2.37	0.12	0.12	0.12	0.12	-	-	-	-	-	-	-
WE-03	Weld Rust Prevention	4001	2.74	-	-	-	-	-	-	-	-	-	-	-
WE-04	Argon Pressurized Storage Tank		-	-	-	-	-	-	-	-	-	-	-	-
WE-05	CO_2 Pressurized Storage Tank		-	-	-	-	-	-	-	-	-	-	-	-
WE-06	Weld Maintenance	4001	-	1.83	1.83	1.83	1.83	-	-	-	-	-	-	-
WE-07	WE cold cleaner	4001	0.18	-	-	-	-	-	-	-	-	-	0.00092	-
TOTAL	WELD DEPARTMENT	4001	9.21	1.95	1.95	1.95	1.95	-	-	-	-	-	0.00692	-

ASSEMBLY DEPARTMENT EMISSION INVENTORY

Unit ID	Emission Source	Associated Stack/Vent IDs	Emissions (tons/year)											
				PM									HAP	
			VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
POINT														
AF-01	Assembly Window Install and Miscellaneous Operations	4002	24.28	-	-	-	-	-	-	-	-	-	0.16	-
AF-02	Gasoline dispensing	4002	0.81	-	-	-	-	-	-	-	-	-	0.19	-
AF-03	Windshield Washer fluid fill	4002	0.04	-	-	-	-	-	-	-	-	-	0.04	-
AF-04	Compressed Natural Gas Tank	NA	-	-	-	-	-	-	-	-	-	-	-	-
AF-05	AF Cold Cleaner	4002	0.18	-	-	-	-	-	-	-	-	-	0.00092	-
VQ-01	VQ Cold Cleaner	4002	0.18	-	-	-	-	-	-	-	-	-	0.00092	-
TOTAL	ASSEMBLY DEPARTMENT	4002	25.49	-	-	-	-	-	-	-	-	-	0.39	-

PAINT DEPARTMENT EMISSION INVENTORY

Unit ID	Emission Source	Associated Stack/Vent IDs	Emissions (tons/year)											
				PM									HAP	
			VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
POINT														
PA-01	Pretreatment/Phosphate Process	1000-1001	-	-	-	-	-	-	-	-	-	-	-	-
PA-02	Electrodeposition (E-coat) Coating Process	1002-1006	2.44	-	-	-	-	-	-	-	-	-	-	-
PA-03	Sealer/Deadner Coating Process	1007, 1018	17.92	-	-	-	-	-	-	-	-	-	3.07	-
PA-04	E-coat Sanding/Inspection	To HVAC intake	-	0.15	0.15	0.15	0.15	-	-	-	-	-	-	-
PA-05	Primer/Surfacer (Guidecoat) Coating Line	1014, 1015, 1017, 1018, 1021-1024	73.93	0.04	0.04	0.04	0.04	-	-	-	-	-	0.85	-
PA-06	Surfacer Sanding/Inspection	To HVAC intake	-	0.50	0.50	0.50	0.50	-	-	-	-	-	-	-
PA-07	Topcoat Coating Line	1032-1039, 1041, 1043-1046	123.97	0.21	0.21	0.21	0.21	-	-	-	-	-	7.50	-
PA-08	On-Line Repair Sanding	Recirc. To Repair Booth	-	0.39	0.39	0.39	0.39	-	-	-	-	-	-	-
PA-09	Topcoat In-Line Repair	1055	1.08	0.24	0.24	0.24	0.24	-	-	-	-	-	0.49	-
PA-10	Topcoat Inspection/Sanding	4029	-	0.17	0.17	0.17	0.17	-	-	-	-	-	-	-
PA-11	Black-out/Wax Coating Line	1062	13.14	0.35	0.35	0.35	0.35	-	-	-	-	-	-	-
PA-12	Final Repair	1063	2.41	0.26	0.26	0.26	0.26	-	-	-	-	-	0.77	-
PA-13	Final Repair Air Dry	4029	0.51	0.11	0.11	0.11	0.11	-	-	-	-	-	0.21	-
PA-14	Miscellaneous Cleaning and Purge Solvent	4029	67.09	-	-	-	-	-	-	-	-	-	12.10	-
PA-15	Wheelabrator	4029	-	0.01	0.01	0.01	0.01	-	-	-	-	-	-	-
PA-16	Paint Test Lab	4029	0.05	0.00	0.00	0.00	0.00	-	-	-	-	-	0.01	-
PA-17	Paint Effluent System	4029	4.01	-	-	-	-	-	-	-	-	-	-	-
PA-18	Virgin purge solvent storage tank		Included with PA-14 Miscellaneous Cleaning and Purge Solvent											
PA-19	Spent purge solvent storage tank													
PA-20	Hot Water Heaters (4 units)	4029, 1150, 1151	Included with Facilities Natural Gas combustion sources											
PA-27	PA Cold Cleaner	4029	0.18	-	-	-	-	-	-	-	-	-	0.00092	-
TOTAL	PAINT DEPARTMENT	1000-1999	306.72	2.43	2.43	2.43	2.43	-	-	-	-	-	25.02	-

PLASTICS DEPARTMENT EMISSION INVENTORY

Unit ID	Emission Source	Associated Stack/Vent IDs	Emissions (tons/year)											
				PM									HAP	
			VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
POINT														
PO-01	Plastic Pretreatment System	2000												
PO-02	Plastic Parts Coating Line (w/b base)	2001,-2008, 2024, 2025, 2027	98.75	4.09	4.09	4.09	4.09						17.62	
	Plastic Parts Coating Line (s/b base)		58.27	4.32	4.32	4.32	4.32						8.91	
PO-04	BPA Polish	2009	0.34										9.9E-04	
PO-05	Misc. Cleaning and Purge Solvent - Plastics Painting	2003, 2004, 2005, 2021	39.12										4.85	
PO-06	Injection Mold Machine #1	2021	2.48											
PO-07	Injection Mold Machine #2	2021	2.48											
PO-08	Injection Mold Machine #3	2021	2.48											
PO-09	Virgin Purge Solvent Storage Tank	2025	0.17										0.10	
PO-10	Spent Purge Solvent Storage Tank	2026	0.18										0.11	
PO-11	Silo 1	2022		0.01	0.01	0.01	0.01							
PO-12	Silo 2	2023		0.01	0.01	0.01	0.01							
PO-14	Plastic Flash Torch #1	2021	0.002	0.003	0.003	0.003	0.003			0.04	-	0.04	1.85E-04	5.45E-07
PO-15	Plastic Regrind #1	2021		0.003	0.003	0.003	0.003							
PO-16	Plastic Regrind #2	2021		0.003	0.003	0.003	0.003							
PO-17	Plastic Parts Touch-Up Booth	2010	0.12	0.003	0.003	0.003	0.003						0.02	
PO-18	Silo 3	2028		0.01	0.01	0.01	0.01							
PO-19	Plastic Flash Torch #2	2021	0.00	0.003	0.003	0.003	0.003			0.04		0.04	1.85E-04	5.45E-07
PO-20	PO Cold Cleaner	2021	0.18										9.20E-04	
TOTAL	PLASTICS DEPARTMENT (w/b base)		146.32	4.12	4.12	4.12	4.12	-	-	0.09	-	0.07	22.71	0.00
TOTAL	PLASTICS DEPARTMENT (s/b base)		105.84	4.35	4.35	4.35	4.35	-	-	0.09	-	0.07	14.00	0.00

FACILITIES DEPARTMENT EMISSION INVENTORY

Unit ID	Emission Source	Associated Stack/Vent IDs	Emissions (tons/year)											
				PM									HAP	
			VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
POINT														
FAC-81	81 kw Emergency Generator	4011	Inc. w/NOx	0.013	0.013	0.013	0.013	-	-	0.179	0.006	0.221	0.0012	-
FAC-82	183 HP Fire Pump	4012	Inc. w/NOx	0.040	0.040	0.040	0.040	-	-	0.787	0.009	0.262	0.0019	-
FAC-83	183 HP Fire Pump	4013	Inc. w/NOx	0.040	0.040	0.040	0.040	-	-	0.787	0.009	0.262	0.0019	-
FAC-84	500kw Emergency Generator	4014	Inc. w/NOx	0.055	0.055	0.055	0.055	-	-	1.662	0.034	0.960	0.0074	-
FAC-85	500kw Emergency Generator	4015	Inc. w/NOx	0.055	0.055	0.055	0.055	-	-	1.662	0.034	0.960	0.0074	-
FAC-86	100 kw Emergency Generator	4016	Inc. w/NOx	0.016	0.016	0.016	0.016	-	-	0.222	0.007	0.273	0.0015	-
FAC-89	81 kw Emergency Generator	4017	Inc. w/NOx	0.013	0.013	0.013	0.013	-	-	0.179	0.006	0.221	0.0012	-
MS-01, FAC-90, FAC-93, FAC-94, Generator belly tanks	Diesel Storage Tanks	4018	0.003	-	-	-	-	-	-	-	-	-	-	-
FAC-96	10,000 gallon aboveground storage tank	1056	0.003	-	-	-	-	-	-	-	-	-	-	-
FAC-97	75,000 lb pressurized refrigerant storage tank	1200	-	-	-	-	-	-	-	-	-	-	-	-
FAC-98	2,000 gallon aboveground storage tank	4003	0.001	-	-	-	-	-	-	-	-	-		-
FAC-99	19,800 gallon aboveground storage tank	4008	4.790	-	-	-	-	-	-	-	-	-	2.01	-
FAC-100	19,800 gallon aboveground storage tank	4009	4.790	-	-	-	-	-	-	-	-	-	2.01	-
FAC-101	2,000 gallon aboveground storage tank	4004	0.001	-	-	-	-	-	-	-	-	-	-	-
FAC-102	2,000 gallon aboveground storage tank	4010	0.029	-	-	-	-	-	-	-	-	-	0.03	-
FAC-103	10,000 gallon aboveground storage tank	4007	0.004	-	-	-	-	-	-	-	-	-	0.004	-
FAC-104	2,000 gallon aboveground storage tank	4005	0.0003	-	-	-	-	-	-	-	-	-	-	-
FAC-105	20,000 gpm Cooling Tower	4019-4026	-	2.24	2.24	2.24	2.24	-	-	-	-	-	-	-
FAC-107	940 gpm Cooling Tower	4028	-	0.11	0.11	0.11	0.11	-	-	-	-	-	-	-
FAC-109	Sulfuric Acid Storage Tank	4045	-	-	-	-	-	-	-	-	-	-	-	-
FAC-113	1000 gallon LPG aboveground storage tank	4049	-	-	-	-	-	-	-	-	-	-	-	-
FAC-114	1000 gallon LPG aboveground storage tank	4050	-	-	-	-	-	-	-	-	-	-	-	-
FAC-115	81 kw Emergency Generator	4033	Inc. w/NOx	0.013	0.013	0.013	0.013	-	-	0.179	0.006	0.221	0.0012	-
FAC-145	3 kw Emergency Generator	4046	0.02	0.001	0.001	0.001	0.001			0.02	0.0002	1.00	0.00004	-
FAC-175	3 kw Emergency Generator	4047	0.02	0.001	0.001	0.001	0.001			0.02	0.0002	1.00	0.00004	-
FAC-176	FAC Cold Cleaner		0.18	-	-	-	-	-	-	-	-	-	0.00092	-
Multiple	All natural gas combustion sources	Multiple	2.70	3.73	3.73	3.73	3.73	-	-	50.00	0.30	91.50	0.93	0.003
FUGITIVE														
FAC-108	Roadways and Parking Areas		-	6.13	2.63	1.00	6.13	-	6.13	-	-	-	-	-
TOTAL	FACILITIES DEPARTMENT		12.54	12.45	8.95	7.32	12.45	-	6.13	55.70	0.41	96.89	5.00	0.003

Emission Unit	New/Modified/ Deleted	Potential To Emit before Modification											
			PM									HAP	
		VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
Body Welding and Finishing WE-02	Modifed	2.374	1.034	1.034	1.034	1.034	-	-	-	-	-	-	-
Weld Maintenance WE-06	New	-	-	-	-	-	-	-	-	-	-	-	-
Sealer/Deadner Coating Process PA-04	Modifed	123.57	-	-	-	-	-	-	-	-	-	21.2	-
Topcoat Coating Line PA-07	Modifed	287.51	149.63	149.63	149.63	149.63	-	-	-	-	-	10.4	-
All Paint and Plastics natural gas combustion units	New/Modified/ Deleted	8.169	11.29	11.29	11.29	11.29	-	-	98.924	0.893	124.833	2.806	0.009
Plastic Parts Coating Line PA-02	Modified	246.36	196	196	196	196	-	-	-	-	-	24.11	-
Instrument Panel Coating Line PA-03	Deleted	6.47	0.4	0.4	0.4	0.4	-	-	-	-	-	1.2	-
Immersion Hot Water Heater PO-13	Deleted	-	-	-	-	-	-	-	-	-	-	-	-
Plastic Flash Torch PO-14	New	-	-	-	-	-	-	-	-	-	-	-	-
Plastic Flash Torch PO-19	New	-	-	-	-	-	-	-	-	-	-	-	-
Silo 3	New	-	-	-	-	-	-	-	-	-	-	-	-
Raw/Painted Plastic Regrind Machine #1 PO-15	New	-	-	-	-	-	-	-	-	-	-	-	-
Raw/Painted Plastic Regrind Machine #2 PO-16	New	-	-	-	-	-	-	-	-	-	-	-	-
Plastic Parts Touch-Up Booth PO-17	New	-	-	-	-	-	-	-	-	-	-	-	-
Space Heat Units (FAC-01-FAC-80; FAC-87; FAC-116-FAC-144, FAC-146-FAC-170)	New/Modified/ Deleted	4.39	6.07	6.07	6.07	6.07	-	-	50.28	0.48	67.07	1.507917	0.005116
500 kw Emergency Generator FAC-84	Modified	0.83	0.041	0.041	0.041	0.041	-	-	0.827	0.03	0.717	0.0055	-
500 kw Emergency Generator FAC-85	Modified	0.83	0.041	0.041	0.041	0.041	-	-	0.827	0.03	0.717	0.0055	-
100 kw Emergency Generator (was 250) FAC-86	Modified	0.55	0.028	0.028	0.028	0.028	-	-	0.554	0.02	0.48	0.0037	-
81 kw Emerggency Generator FAC-81	Modified	0.17	0.012	0.012	0.012	0.012	-	-	0.165	0.01	0.204	0.0011	
81 kw Emergency Generator FAC-89	New	-	-	-	-	-	-	-	-	-	-	-	-
183 HP Fire Pump FAC-82	Modified	1.72	0.09	0.09	0.09	0.09	-	-	1.72	0.02	0.57	0.0044	-
183 HP Fire Pump FAC-83	Modified	1.72	0.09	0.09	0.09	0.09	-	-	1.72	0.02	0.57	0.0044	-
75,000 lb Pressurized Refrigerant Tank FAC-97	Modified	-	-	-	-	-	-	-	-	-	-	-	-
2000 Gallon Aboveground Storage Tank FAC-98	Modified	0.001	-	-	-	-	-	-	-	-	-	-	-
2000 Gallon Aboveground Storage Tank FAC-102	Modified	0.053	-	-	-	-	-	-	-	-	-	0.053	-
2,370 gpm Air Compressor Cooling Tower FAC-106	Deleted	-	0.66	0.66	0.66	0.66	-	-	-	-	-	-	-
940 gpm Air Compressor Cooling Tower FAC-107	Modified	-	0.25	0.25	0.25	0.25	-	-	-	-	-	-	-
1000 gallon LPG Aboveground Storage Tank FAC-113	New	-	-	-	-	-	-	-	-	-	-	-	-
1000 gallon LPG Aboveground Storage Tank FAC-114	New	-	-	-	-	-	-	-	-	-	-	-	-
81 kw Emergency Generator FAC-115	New	-	-	-	-	-	-	-	-	-	-	-	-
3 kw Gasoline Powered Emergency Generator FAC-145	New	-	-	-	-	-	-	-	-	-	-	-	-
3 kw Gasoline Powered Emergency Generator FAC-175	New	-	-	-	-	-	-	-	-	-	-	-	-
Cold cleaners (7 additional cold cleaners)	New	-	-	-	-	-	-	-	-	-	-	-	-
Total		684.7	365.6	365.6	365.6	365.6	0.0	0.0	155.0	1.5	195.2	61.3	0.0

Emission Unit	New/Modified/ Deleted	Potential To Emit after Modification											
			PM									HAP	
		VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
Body Welding and Finishing WE-02	Modifed	2.374	1.034	1.034	1.034	1.034	-	-	-	-	-	-	-
Weld Maintenance WE-06	New	-	0.0097	0.0097	0.0097	0.0097	-	-	-	-	-	0.00025	0.00025
Sealer/Deadner Coating Process PA-04	Modifed	123.57	-	-	-	-	-	-	-	-	-	21.2	-
Topcoat Coating Line PA-07	Modifed	287.51	149.63	149.63	149.63	149.63	-	-	-	-	-	10.4	-
All Paint and Plastics natural gas combustion units	New/Modified/ Deleted	8.247	11.397	11.397	11.397	11.397	-	-	103.108	0.899	227.264	2.6	0.00848
Plastic Parts Coating Line PA-02	Modified	252.83	196.4	196.4	196.4	196.4	-	-	-	-	-	25.31	-
Instrument Panel Coating Line PA-03	Deleted	-	-	-	-	-	-	-	-	-	-	-	-
Immersion Hot Water Heater PO-13	Deleted	-	-	-	-	-	-	-	-	-	-	-	-
Plastic Flash Torch PO-14	New	0.002	0.003	0.003	0.003	0.003	-	-	0.043	-	0.036	0.000185	5.45E-07
Plastic Flash Torch PO-19	New	0.002	0.003	0.003	0.003	0.003	-	-	0.043	-	0.036	0.000185	5.45E-07
Silo 3	New	-	0.005	0.005	0.005	0.005	-	-	-	-	-	-	-
Raw/Painted Plastic Regrind Machine #1 PO-15	New	0	0.003	0.003	0.003	0.003	-	-	-	-	-	-	-
Raw/Painted Plastic Regrind Machine #2 PO-16	New	0	0.003	0.003	0.003	0.003	-	-	-	-	-	-	-
Plastic Parts Touch-Up Booth PO-17	New	0.12	0.003	0.003	0.003	0.003	-	-	-	-	-	0.0221	-
Space Heat Units (FAC-01-FAC-80; FAC-87; FAC-116-FAC-144, FAC-146-FAC-170)	New/Modified/ Deleted	2.4	3.3	3.3	3.3	3.3	-	-	33.2	0.3	74.7	0.809	0.0026
500 kw Emergency Generator FAC-84	Modified	1.662	0.055	0.055	0.055	0.055	-	-	1.662	0.034	0.96	0.00739	-
500 kw Emergency Generator FAC-85	Modified	1.662	0.055	0.055	0.055	0.055	-	-	1.662	0.034	0.96	0.00739	-
100 kw Emergency Generator (was 250) FAC-86	Modified	0.222	0.016	0.016	0.016	0.016	-	-	0.222	0.007	0.273	0.0015	-
81 kw Emerggency Generator FAC-81	Modified	0.179	0.013	0.013	0.013	0.013	-	-	0.179	0.006	0.221	0.0012	
81 kw Emergency Generator FAC-89	New	0.179	0.013	0.013	0.013	0.013	-	-	0.179	0.006	0.221	0.0012	-
183 HP Fire Pump FAC-82	Modified	0.787	0.04	0.04	0.04	0.04	-	-	0.787	0.009	0.262	0.0019	-
183 HP Fire Pump FAC-83	Modified	0.787	0.04	0.04	0.04	0.04	-	-	0.787	0.009	0.262	0.0019	-
75,000 lb Pressurized Refrigerant Tank FAC-97	Modified	-	-	-	-	-	-	-	-	-	-	-	-
2000 Gallon Aboveground Storage Tank FAC-98	Modified	0.001	-	-	-	-	-	-	-	-	-	-	-
2000 Gallon Aboveground Storage Tank FAC-102	Modified	0.029	-	-	-	-	-	-	-	-	-	0.029	-
2,370 gpm Air Compressor Cooling Tower FAC-106	Deleted	-	-	-	-	-	-	-	-	-	-	-	-
940 gpm Air Compressor Cooling Tower FAC-107	Modified	-	0.11	0.11	0.11	0.11	-	-	-	-	-	-	-
1000 gallon LPG Aboveground Storage Tank FAC-113	New	-	-	-	-	-	-	-	-	-	-	-	-
1000 gallon LPG Aboveground Storage Tank FAC-114	New	-	-	-	-	-	-	-	-	-	-	-	-
81 kw Emergency Generator FAC-115	New	0.179	0.013	0.013	0.013	0.013	-	-	0.179	0.006	0.221	0.0012	-
3 kw Gasoline Powered Emergency Generator FAC-145	New	0.02	0.001	0.001	0.001	0.001	-	-	0.02	-	1.003	-	-
3 kw Gasoline Powered Emergency Generator FAC-175	New	0.02	0.001	0.001	0.001	0.001	-	-	0.02	-	1.003	-	-
Cold cleaners (7 additional cold cleaners)	New	1.288	-	-	-	-	-	-	-	-	-	0.01	-
Total		682.8	362.1	362.1	362.1	362.1	0.0	0.0	142.1	1.3	307.4	60.4	0.0

		Potential To Emit (Change)											
			PM									HAP	
Emission Unit	New/Modified/ Deleted	VOC	PM	PM10	PM2.5	TSP	Fugitive Dust	Fugitive PM	NOx	SOx	CO	Total HAP	HAP PM
Body Welding and Finishing WE-02	Modifed	0	0	0	0	0	0	0	0	0	0	0	0
Weld Maintenance WE-06	New	0	0.01	0.0097	0.0097	0.0097	0	0	0	0	0	0.00025	0.00025
Sealer/Deadner Coating Process PA-04	Modifed	0	0	0	0	0	0	0	0	0	0	0	0
Topcoat Coating Line PA-07	Modifed	0	0	0	0	0	0	0	0	0	0	0	0
All Paint and Plastics natural gas combustion units	New/Modified/ Deleted	0.078	0.107	0.107	0.107	0.107	0	0	4.184	0.006	102.431	-0.206	-0.00052
Plastic Parts Coating Line PA-02	Modified	6.47	0.4	0.4	0.4	0.4	0	0	0	0	0	1.2	0
Instrument Panel Coating Line PA-03	Deleted	-6.47	-0.4	-0.4	-0.4	-0.4	0	0	0	0	0	-1.2	0
Immersion Hot Water Heater PO-13	Deleted	0	0	0	0	0	0	0	0	0	0	0	0
Plastic Flash Torch PO-14	New	0.002	0.003	0.003	0.003	0.003	0	0	0.043	0	0.036	0.000185	5.45E-07
Plastic Flash Torch PO-19	New	0.002	0.003	0.003	0.003	0.003	0	0	0.043	0	0.036	0.000185	5.45E-07
Silo 3	New	0	0.005	0.005	0.005	0.005	0	0	0	0	0	0	0
Raw/Painted Plastic Regrind Machine #1 PO-15	New	0	0.003	0.003	0.003	0.003	0	0	0	0	0	0	0
Raw/Painted Plastic Regrind Machine #2 PO-16	New	0	0.003	0.003	0.003	0.003	0	0	0	0	0	0	0
Plastic Parts Touch-Up Booth PO-17	New	0.12	0.003	0.003	0.003	0.003	0	0	0	0	0	0.0221	0
Space Heat Units (FAC-01-FAC-80; FAC-87; FAC-116-FAC-144, FAC-146-FAC-170)	New/Modified/ Deleted	-1.99	-2.77	-2.77	-2.77	-2.77	0	0	-17.08	-0.18	7.63	-0.69892	-0.00252
500 kw Emergency Generator FAC-84	Modified	0.835	0.014	0.014	0.014	0.014	0	0	0.835	0.008	0.243	0.00189	0
500 kw Emergency Generator FAC-85	Modified	0.835	0.014	0.014	0.014	0.014	0	0	0.835	0.008	0.243	0.00189	0
100 kw Emergency Generator (was 250) FAC-86	Modified	-0.332	-0.012	-0.012	-0.012	-0.012	0	0	-0.332	-0.01	-0.207	-0.0022	0
81 kw Emerggency Generator FAC-81	Modified	0.014	0.001	0.001	0.001	0.001	0	0	0.014	0.001	0.017		
81 kw Emergency Generator FAC-89	New	0.179	0.013	0.013	0.013	0.013	0	0	0.179	0.006	0.221	0.0012	0
183 HP Fire Pump FAC-82	Modified	-0.933	-0.048				0	0	-0.933	-0.012	-0.311		0
183 HP Fire Pump FAC-83	Modified	-0.933	-0.048				0	0	-0.933	-0.012	-0.311		0
75,000 lb Pressurized Refrigerant Tank FAC-97	Modified	0	0	0	0	0	0	0	0	0	0	0	0
2000 Gallon Aboveground Storage Tank FAC-98	Modified	0	0	0	0	0	0	0	0	0	0	0	0
2000 Gallon Aboveground Storage Tank FAC-102	Modified	-0.024	0	0	0	0	0	0	0	0	0	-0.024	0
2,370 gpm Air Compressor Cooling Tower FAC-106	Deleted	0	-0.66	-0.66	-0.66	-0.66	0	0	0	0	0	0	0
940 gpm Air Compressor Cooling Tower FAC-107	Modified	0	-0.14	-0.14	-0.14	-0.14	0	0	0	0	0	0	0
1000 gallon LPG Aboveground Storage Tank FAC-113	New	0	0	0	0	0	0	0	0	0	0	0	0
1000 gallon LPG Aboveground Storage Tank FAC-114	New	0	0	0	0	0	0	0	0	0	0	0	0
81 kw Emergency Generator FAC-115	New	0.179	0.013	0.013	0.013	0.013	0	0	0.179	0.006	0.221	0.0012	0
3 kw Gasoline Powered Emergency Generator FAC-145	New	0.02	0.001	0.001	0.001	0.001	0	0	0.02	0	1.003	0	0
3 kw Gasoline Powered Emergency Generator FAC-175	New	0.02	0.001	0.001	0.001	0.001	0	0	0.02	0	1.003	0	0
Cold cleaners (7 additional cold cleaners)	New	1.288	0	0	0	0	0	0	0	0	0	0.00644	0
Total		-1.9	-3.5	-3.4	-3.4	-3.4	0.0	0.0	-12.9	-0.2	112.3	-0.9	0.0

Appendix B

CONTROL TECHNOLOGY / PSD BACT ANALYSIS

Honda Manufacturing of Indiana, LLC

Source Background and Description

Source Location:	**2755 N. Michigan Avenue, Greensburg, Indiana 47240**
County:	**Decatur**
SIC Code:	**3711, 3714**
Significant Permit Modification No.:	**031-24706-00026**
Significant Source Modification No.:	**031-24760-00026**

The proposed automotive and light-duty truck assembly plant is a major source for VOC, with the potential to emit greater than 250 tons per year. Potential emissions of NOx and PM/PM10 are also above their respective significance levels. Therefore, the proposed automotive and light-duty truck assembly plant was subject to Prevention of Significant Deterioration (PSD) requirements.

The following BACT analysis is a re-evaluation of the current PSD BACT established in PSD/Part 70 operating permit No.: 031-23360-00026, issued on October 19, 2006, since the plant has not been constructed.

The BACT analysis was based on the draft “Top-Down approach: BACT Guidance” published by USEPA, Office of Air Quality Planning Standards, March 15, 1990. 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.

The BACT for the following new and modified emission units will be re-evaluated for VOC, PM/PM10 and NOx:

(1) Body Painting: Sealer/Deadener Coating Process/ Primer/Surfacer Coating Line/ Topcoating.
(2) Plastics Painting: Instrument Panel Painting Line.
(3) Plastics Painting: Plastic Parts Touch-Up Booth.
(4) Body Welding and Finishing: MIG Welding D-Zone and MIG Welding Manual Backup/Repair.
(5) Brake Fluid Aboveground Storage Tank.
(6) Windshield Washer Fluid Aboveground Storage Tank.
(7) Natural Gas Combustion for Process and Space Heating.

BACT for Volatile Organic Compounds (VOC):

(1) Body Painting: Sealer/Deadener Coating Process/ Primer/Surfacer Coating Line/ Topcoating.
(2) Plastics Painting: Instrument Panel Painting Line.
(3) Plastics Painting: Plastic Parts Touch-Up Booth.
(4) Brake Fluid Aboveground Storage Tank.
(5) Windshield Washer Fluid Aboveground Storage Tank.
(6) Natural Gas Combustion for Process and Space Heating.

(A) Body Painting Operations -

Honda is proposing to eliminate the bake oven for the Sealer/Deadener Coating Process. Honda has determined that this oven is not needed as part of the sealer/deadener coating process. The intended purpose of the oven was to accomplish a skinning over of the sealer/deadener materials to prevent quality defects from inadvertent touching or otherwise deforming the sealer/deadener materials after application. The sealed and deadened vehicle will be cured in the primer/surfacer coating oven which then follows the primer/surfacer application.

Step 1: Identification of control technologies for the body painting operations:

(1) Absorption systems – These systems are not technically feasible because the multiple constituent gas streams typically encountered require the use of multiple absorption systems to allow removal of all constituents. There were no instances identified where absorption systems were in use for VOC emissions control on main body coating operations for OEM auto and light-duty truck manufacturing. Therefore no further evaluation was made for these systems.

(2) Adsorption systems – These systems alone are not technically feasible because of the particulate matter in the exhaust stream and because the hygroscopic properties of carbon often require the use of dehumidification when applied to waterborne coating booths and booths using wet scrubbers for particulate removal. There were no instances identified where adsorption systems alone were in use for VOC emissions control on main body coating operations for OEM auto and light-duty truck manufacturing. Therefore no further evaluation was made for these systems.

(3) Condensation systems – These systems work by condensing gaseous vapors to liquid phase either through increasing the system pressure at constant temperature or decreasing system temperature at constant pressure. These systems are effective only with high gaseous concentrations in excess of 100 ppmv. The exhaust streams from OEM auto and light-duty truck main body coating operations are very dilute. Condensation technology is not technically feasible for main body coating operations. There were no instances identified where condensation systems were in use for VOC emissions control on main body coating operations for OEM auto and light-duty truck manufacturing. Therefore no further evaluation was made for these systems.

(4) Biological control systems – These systems for organic emissions include biofilters, biotrickling filters and bioscrubbers. The technology can typically be used to control low to moderate concentrations of biodegradable organic emissions. There are numerous operational limitations to the use of biological treatment systems including (1) pollutants of concern must be biodegradable within a relatively short time frame; (2) limited to very low organic loading rates (1 gram/cubic meter); (3) function only in a very narrow temperature range (15 C to 35 C) requiring supplemental heat or cooling outside the range; (4) pH maintenance; (5) typically periods of acclimation are required at start-up and after shutdown periods; and (6) mixtures of organics degrade at different rates and require extensive pilot testing to predict performance. Because of these limitations,

Honda does not consider this technology technically feasible for controlling VOC emissions from main body coating operations at OEM auto and light-duty manufacturing plants. There were no instances identified where biodegradation systems were in use for VOC emissions control on main body coating operations for OEM auto and light-duty truck manufacturing. Therefore, no further evaluation was made for these systems.

(5) Two oxidation technologies were also determined not to be technically feasible for VOC emissions control for main body coating operations for OEM auto and light-duty truck manufacturing operations. These were the use of flares and UV oxidation. Therefore, no further evaluation was made for these systems.

(6) Flares are typically used for safety control of a large volume of hydrocarbon pollutant resulting from a process upset. They require a high heating value waste gas (in excess of 300 BTU/scf) or supplemental fuel. Flares can produce undesirable noise, light, and smoke and waste heat cannot be recovered. Flares are not considered technically feasible for VOC control of auto body coating operations due to the low VOC concentration in the exhaust stream and continuous air flow. There were no instances identified where flares were in use for VOC emissions control on main body coating operations for OEM auto and light-duty truck manufacturing. Therefore no further evaluation was made for these systems.

(7) UV oxidation is used to eliminate VOC through a 2 or 3 stage process. The exhaust air stream is treated with a UV-C light in the first phase, beginning the photolytic oxidation process. In the second stage, ozone is used to complete the oxidation of contaminants. As needed, a third stage filtration is used to catalyze the reaction. The process is best suited for treatment of easily oxidized organic compounds. There are a number of problems with the application of this technology to VOC reduction from auto and light-duty truck coating operations, including difficulty in selecting the appropriate UV light frequency for the expected matrix of volatile organics, pretreatment requirements, catalyst interferences, particularly moisture and long-chain organics, high energy requirements and excessive maintenance requirements. For these reasons, UV oxidation was determined to not be technically feasible for VOC control of auto body coating operations. There were no instances identified where UV oxidation was in use for VOC emissions control on main body coating operations for OEM auto and light-duty truck manufacturing. Therefore no further evaluation was made for these systems.

(8) Other combustion systems and combination systems were identified as technically feasible for controlling VOC emissions from OEM auto and light-duty truck coating operations. Feasible combustion systems include recuperative oxidation, regenerative oxidation, and catalytic oxidation systems. Feasible combination systems are adsorption/oxidation systems. These options will be further evaluated for control of VOC emissions from main body coating booths and ovens.

Step 2: Evaluation of Most Effective Controls:

Further evaluation including economic, energy and environmental impacts are required for controlling VOC emissions from different areas in the body painting operation. Annualized costs were determined in accordance with the EPA guidance (EPA's *Office of Air Quality Planning and Standards Control Cost Manual*) and economic feasibility was evaluated.

Economic Impact Analysis:

The most cost-effective way to reduce VOC emissions from the main body coating operation is to utilize the fewest number of control devices, while controlling the exhaust gas streams with the highest VOC loading rates.

Case 1:

Controlled: E-coat tank and bake oven; primer/surfacer booth and oven; basecoat booths; clearcoat booths and topcoat oven; repair booth and oven; blackout/cavity wax booth.

Uncontrolled: Sealer deck

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

Case 2:

Controlled: E-coat tank and bake oven; primer/surfacer booth and oven; basecoat booths; clearcoat booths and topcoat oven; repair booth and oven.

Uncontrolled: Sealer deck; blackout/cavity wax booth.

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

Case 3:

Controlled: E-coat tank and bake oven; primer/surface booth and oven; basecoat booths; clear coat booths and topcoat oven.

Uncontrolled: Sealer deck; blackout/cavity wax booth; repair booth oven.

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

Case 4:

Controlled: E-coat bake oven; primer/surfacer booth and oven; basecoat booths, clearcoat booths and topcoat oven.

Uncontrolled: Sealer deck; blackout/cavity wax booth; repair booth oven; and E-coat

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

Case 5:

Controlled: E-coat bake oven; primer/surfacer oven; basecoat booths; clearcoat booths and topcoat oven.

UnControlled: Sealer deck; blackout/cavity wax booth; repair booth oven; E-coat tank; primer/surfacer booth.

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

Case 6:

Controlled: E-coat bake oven; primer/surfacer oven; clearcoat booths and topcoat oven.

Uncontrolled: Sealer deck; blackout/cavity wax booth; repair booth oven; E-coat tank; primer/surfacer booth.

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

Case 7:

Controlled: E-coat tank and bake oven; primer/surfacer oven; clearcoat booths and topcoat oven.

Uncontrolled: Sealer deck; blackout/cavity wax booth; repair booth oven; primer/surfacer booth; basecoat booths.

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

Case 8:

Controlled: E-coat tank and bake oven; primer/surfacer oven; basecoat booths, clearcoat booths and topcoat oven.

Uncontrolled: Sealer deck; blackout/cavity wax booth; repair booth oven; E-coat tank; Primer/surfacer booth.

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

Case 9:

Controlled: E-coat tank and bake oven; primer/surfacer booth and oven; clearcoat booths and topcoat oven.

Uncontrolled: Sealer deck; blackout/cavity wax booth; repair booth oven; E-coat tank; basecoat booth.

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

Case 10:

Controlled: E-coat bake oven; primer/surfacer booth and oven; clearcoat booths and topcoat oven.

Uncontrolled: Sealer deck; blackout/cavity wax booth; repair booth oven; E-coat tank; basecoat booths.

The original PSD BACT included the sealer oven in the cost analysis. Cost analysis for this modification remains the same since the VOC emissions from the sealer/deadener process will not change. The emissions will be routed to the primer/surfacer oven. The RTO analyzed in the original BACT cost analysis will control the same total VOC emissions (See original PSD BACT for detailed cost analysis).

This economic evaluation for all cases indicated no change in the cost per ton VOC removed or the ton of VOC removed. Therefore, the economic feasibility of the original BACT analysis remains unchanged.

Step 3: Selection of BACT:

Honda Manufacturing of Indiana, LLC proposes to comply with the original BACT limits and control technologies for the following emission units affected by this modification:

Sealer/Deadener Application				
Emission Limit	**Control Technology**	**Permit Issuance Date**	**Company Name/Location**	**Basis BACT/LAER**
Proposed BACT 0.3 lb/gallon (monthly vol. weighted average) Original BACT 0.3 lb/gallon (monthly vol. weighted average)	Bake oven with RTO at 95% DRE Bake oven with RTO at 95% DRE	Not yet Issued 10/19/06	Honda Manufacturing of Indiana, LLC – Greensburg, IN Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT BACT
0.30 lb/gal minus water (monthly volume weighted average)	Low VOC materials	9/2/04	Daimler-Chrysler - Lucas Co, OH	LAER
0.3 lb/gallon of coating (averaging time is not specified)	None identified	6/21/04	Toyota Motor Mfg. Texas, Inc.- San Antonio, TX	BACT
0.30 lb/gal as applied (monthly volume weighted average)	RTO, VOC limits in materials	3/23/04	Hyundai Motor Mfg.- Montgomery Co, AL	BACT

Sealer/Deadener Application				
Emission Limit	**Control Technology**	**Permit Issuance Date**	**Company Name/Location**	**Basis BACT/LAER**
0.30 lb/gal as applied (monthly volume weighted average)	Low VOC materials	10/18/02	Honda Mfg. of Alabama LLC - Talladega Co., AL	BACT
Limit 1: 0.30 lb/gacs: Sealers/adhesives (monthly volume weighted average) Standard Limit: 0.30 lb/gal	No methyl acetate Good housekeeping practices Waterborne deadener material	9/26/01	GM-Delta Township - Eaton Co., MI	BACT

Honda is not proposing any change to the BACT determination as a result of this modification, which is still the most stringent BACT for this operation. The emissions from the curing of the sealer/deadener materials will occur in the Primer/Surfacer Coating Line bake oven which will be controlled by a regenerative thermal oxidizer. Based on laboratory testing of the sealer/deadener materials, overall capture efficiency will remain in excess of 90%.

Primer/Surfacer Process				
Emission Limit	**Control Technology**	**Permit Issuance Date**	**Company Name/Location**	**Basis BACT/LAER**
Proposed BACT: 3.46 lb/gacs (daily volume weighted average)	Bake oven with RTO at 95% DRE, waterborne primer	Not Yet Issued	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Original BACT: 3.46 lb/gacs (daily volume weighted average)	Bake oven with RTO at 95% DRE, waterborne primer	10/19/06	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
0.05 lb/gal solids (monthly vol. wt. avg.)	Electrostatic powder anti-chip primer	9/2/04	Daimler-Chrysler- Lucas Co, OH	LAER

Primer/Surfacer Process				
Emission Limit	**Control Technology**	**Permit Issuance Date**	**Company Name/Location**	**Basis BACT/LAER**
4.1 lb/gacs primer only 4.6 lb/gacs combined P/S, T/C and window install (averaging time is not specified)	Oven oxidation 95% DRE	6/21/04	Toyota Motor Mfg. Texas, Inc -. San Antonio, TX	BACT
4.1 lb/gacs (monthly volume weighted average)	Oven oxidation 95% DRE Waterborne primer	3/23/04	Hyundai Motor Manufacturing - Montgomery Co, AL	BACT
2.2 lb/hour	Powder coating only	1/14/03	GM-Moraine - Montgomery Co., OH	BACT
4.1 lb/gacs (monthly volume weighted average)	Oven RTO 95% DRE Waterborne primer	10/18/02	Honda Mfg. of Alabama LLC - Talladega Co., AL	BACT
No identified limits	Electrostatic powder coating	9/26/01	GM-Delta Township - Eaton Co., MI	BACT
4.1 lb/gacs (Averaging time not specified)	Waterborne primer Oven control	4/2/01	Nissan North America - Madison Co., MS	BACT
Proposed 4.5 lb/gacs combined Topcoat and Surfacer (daily volume weighted average)	RTO controlling auto zone 95% DRE	Proposed	AM General, LLC - St. Joseph Co. IN	BACT
3.46 lb/gacs (daily volume weighted average)	100% flash off and oven control 85% booth control using solvent based coatings, Carbon concentrator/thermal oxidizer (71% overall control)	1999	GM – Flint Assembly Flint, Michigan	BACT

Honda is not proposing any change to the BACT determination as a result of this modification, which is still the most stringent BACT for this operation. The emissions from the curing of the sealer/deadener materials will occur in the Primer/Surfacer Coating Line bake oven which will be controlled by a regenerative thermal oxidizer.

Topcoating

Honda was originally permitted to install two topcoat 3-stage oven tunnels, with a total heat input of 22 MMBtu/hr. Honda proposes to replace these two ovens with a single longer bake oven that has a maximum heat input of 11.2 MMBtu/hr.

Topcoating				
Emission Limit	**Control Technology**	**Permit Issuance Date**	**Company Name/Location**	**Basis BACT/LAER**
Proposed: 5.2 lb/gacs (daily volume weighted average)	Waterborne basecoat coatings. Clearcoat booths and topcoat oven controlled by RTOs with 95% DRE	Not Yet Issued	Honda Manufacturing of Indiana, LLC - Greensburg, IN	BACT
Original BACT: 5.2 lb/gacs (daily volume weighted average)	Waterborne basecoat coatings. Clearcoat booths and topcoat oven controlled by RTOs with 95% DRE	10/19/06	Honda Manufacturing of Indiana, LLC - Greensburg, IN	BACT
5.42 lb/gacs (daily volume wt. avg.)	Oven and auto zone clearcoat control 95% DRE	9/2/04	Daimler-Chrysler - Lucas Co, OH	LAER
5.2 lb/gacs TC alone 4.6 lb/gacs combined P/S, T/C and window install (averaging time is not specified)	Control of clearcoat auto spray zones with 86% overall eff Control of T/C ovens with 95% DRE	6/21/04	Toyota Motor Mfg. Texas, Inc. - San Antonio, TX	BACT
5.2 lb/gacs (monthly volume weighted average)	Oven and auto clearcoat zone control 95% DRE Waterborne basecoat	3/23/04	Hyundai Motor Manufacturing - Montgomery Co, AL	BACT
8.24 lb/gacs (Averaging time not specified)	Robot clearcoat, bell areas and clearcoat bake ovens controlled Carbon ad. w/ thermal incinerator 85.5% DRE	1/14/03	GM-Moraine - Montgomery Co., OH	BACT

Topcoating				
Emission Limit	**Control Technology**	**Permit Issuance Date**	**Company Name/Location**	**Basis BACT/LAER**
5.2 lb/gacs (monthly volume weighted average)	Oven and auto clearcoat zone control 95% DRE Waterborne basecoat	10/18/02	Honda Mfg. of Alabama LLC - Talladega Co., AL	BACT
5.42 lb/gacs (daily volume weighted average)	Waterborne heated flash, topcoat oven and auto clearcoat zone control 95% DRE Waterborne basecoat	9/26/01	GM-Delta Township - Eaton Co., MI	BACT
5.2 lb/gacs (Averaging time not specified)	Oven and auto clearcoat zone control 95% DRE Waterborne basecoat	4/2/01	Nissan North America - Madison Co., MS	BACT
Proposed 4.5 lb/gacs combined Topcoat and Surfacer (daily volume weighted average)	RTO controlling auto zone 95% DRE Good work practices		AM General, LLC - St. Joseph Co. IN	BACT

Honda is not proposing any change to the BACT determination as a result of this modification, which is still the most stringent BACT for this operation. In addition, reduction in combustion emissions will result due to the change in the heat input of the oven.

(B) Plastic Painting Operation:

Honda proposes to eliminate the separate instrument panel painting booth and bake oven. Instead, instrument panels will be coated in the Plastics Parts Coating Line (PO-02) primer booth. The instrument panels will then move through the basecoat booth and clearcoat booth and into the bake oven for curing.

As with the plastic painting operations, the most cost-effective methods to reduce VOC emissions from the plastic parts coating operations have been evaluated based on economy of scale.

Honda proposes to eliminate the separate painting booth and bake oven. Instead, instrument panels will be coated in the plastic parts coating line (PO-02) primer booth.

Honda is not proposing any change to the BACT determination for instrument panel painting as a result of this modification.

The following cases were evaluated for the instrument panel coating line (PO-03), which show the comparison between the Original BACT cost effectiveness and the modified BACT cost effectiveness:

Case 1a and Case 6a originally did not include Instrument Panel to be controlled by the RTO. The new cost effectiveness included the instrument panel as being controlled by the RTO.

All other cases will not be affected by the inclusion of the instrument panel in the plastic parts operation.

Case 1a : **Controlled: Primer booth, Basecoat booth and flash-off, Clearcoat booth, Topcoat Oven, Instrument Panel.** **Uncontrolled: Sealer**				**New Cost Effectiveness**	**Original Cost Effectiveness**
CAPITAL COST (Pollution Control Equipment)		Unit Cost	Basis	TOTAL ($)	
Purchased Equipment					
	Basic Equipment and Auxiliaries	A	(1)	$5,159,440	
	Instrumentation and Controls		(1)	Included in A	
	Sales Taxes	0.03 A	(2)		0
	Freight	0.05 A	(2)	Included in A	
Total Purchased Equipment Costs			B =	$5,159,440	
Direct Installation Costs					
	Foundation and Support	0.08 B	(1)	$333,500	
	Handling and Erection	0.14 B	(1)	Included in A	
	Electrical	0.04 B	(1)	Included in A	
	Piping	0.02 B	(1)	Included in A	
	Ductwork		(1)	Included in A	
	Insulation for ductwork	0.01 B	(1)	Included in A	
	Painting		(1)	Included in A	
Total Installation Costs				$333,500	
TOTAL Direct Costs (TDC) = (B + DI)				$5,492,940	$5,492,940
Indirect Installation Costs					
	Engineering	0.10 B	(1)	Included in A	
	Construction and Field Expenses	0.05 B	(1)	Included in A	
	Contractor Fees	0.10 B	(1)	Included in A	
	Start-up	0.02 B	(1)	Included in A	
	Performance Test	0.01 B	(2)	$51,594	
	Emissions Monitoring Equipment		(3)	$5,000	
	Contingencies	0.03 B	(2)	$154,783	
Total Indirect Installation Costs (IC)				$211,378	
TOTAL CAPITAL INVESTMENT (TCI) = (TDC + IC)		C		$5,704,318	$5,704,318
ANNUAL OPERATION & MAINTENANCE					
Direct Operating Costs (DA)					
	Operating Labor (0.5 hr/shiftx2shiftsx275days/yrx$17.84/hr)		(2)	$4,906	
	Supervisory Labor (15% of operating labor)		(2)	$736	
	Maintenance Labor (0.5 hr/shift)		(2)	$4,906	
	Maintenance Materials		(1)	$60,000	
	Natural Gas ($13.54/1000cf,)		(1)	$790,417	
	Electricity ($0.0534/kWh)		(1)	$296,891	

Case 1a : **Controlled: Primer booth, Basecoat booth and flash-off, Clearcoat booth, Topcoat Oven, Instrument Panel.** **Uncontrolled: Sealer**				**New Cost Effectiveness**	**Original Cost Effectiveness**
	Taxes, Insurance, Administrative Costs	0.04 C	(2)	$228,173	
Total Operation and Maintenance Cost				$1,386,029	$1,157,856
Notes:					
(1) Based on estimated cost from TKS. TKS costs based on similar installations and engineering estimations.					
(2) Factor based on USEPA Office of Air Quality Planning and Standards Control Cost Manual (EPA 450/3-90-006).					
(3) Estimate based on pricing from 1997 RS Means Mechanical Cost Data manual					
	Capital Recovery Factor (system) = 0.1490 (Assumes 8% compound interest rate and system useful life of 10 years)				
Amortized Annual Costs = Annual O&M Costs + System Capital Recovery					
Amortized Annual Costs = Total Operating Costs				$2,236,143.12	$2,378,580
Tons VOC Removed =				215.61	219.91
Cost per Ton Removed =				**$10,371**	**$10,816**

Case 6a: **Controlled: Primer booth, Basecoat booth and Flash-off, Clearcoat booth, Topcoat oven**				**New Cost Effectiveness**	**Original Cost Effectiveness**
CAPITAL COST (Pollution Control Equipment)		Unit Cost	Basis	TOTAL ($)	
Purchased Equipment					
	Basic Equipment and Auxiliaries	A	(1)	$5,159,440	
	Instrumentation and Controls		(1)	Included in A	
	Sales Taxes	0.03 A	(2)		$0
	Freight	0.05 A	(2)	Included in A	
Total Purchased Equipment Costs			B =	$5,159,440	
Installation Cost					
	Foundation and Support	0.08 B	(1)	$333,500	
	Handling and Erection	0.14 B	(1)	Included in A	
	Electrical	0.04 B	(1)	Included in A	
	Piping	0.02 B	(1)	Included in A	
	Ductwork		(1)	Included in A	
	Insulation for ductwork	0.01 B	(1)	Included in A	
	Painting		(1)	Included in A	
Total Installation Cost				$333,500	
TOTAL Direct Costs (TDC) = (B + DI)				$5,492,940	$5,492,940
Other Capital Cost					
	Engineering	0.10 B	(1)	Included in A	
	Construction and Field Expenses	0.05 B	(1)	Included in A	
	Contractor Fees	0.10 B	(1)	Included in A	

Case 6a: Controlled: Primer booth, Basecoat booth and Flash-off, Clearcoat booth, Topcoat oven				New Cost Effectiveness	Original Cost Effectiveness
	Start-up	0.02 B	(1)	Included in A	
	Performance Test	0.01 B	(2)	$51,594	
	Emissions Monitoring Equipment		(3)	$5,000	
	Contingencies	0.03 B	(2)	$154,783	
Total Other Capital Cost				$211,378	
TOTAL CAPITAL COST		C		$5,704,318	$5,704,318
ANNUAL OPERATION & MAINTENANCE					
	Operating Labor (0.5 hr/shiftx2shiftsx275days/yrx$17.84/hr)		(2)	$4,906	
	Supervisory Labor (15% of operating labor)		(2)	$736	
	Maintenance Labor (0.5 hr/shift)		(2)	$4,906	
	Maintenance Materials		(1)	$60,000	
	Natural Gas ($13.54/1000cf,)		(1)	$790,417	
	Electricity ($0.0534/kWh)		(1)	$247,409	
	Taxes, Insurance, Administrative Costs	0.04 C	(2)	$228,173	
TOTAL OPERATION & MAINTENANCE COST				$1,336,547	$1,336,547
Notes:					
(1) Based on estimated cost from TKS. TKS costs based on similar installations and engineering estimations.					
(2) Factor based on USEPA Office of Air Quality Planning and Standards Control Cost Manual (EPA 450/3-90-006).					
(3) Estimate based on pricing from 1997 RS Means Mechanical Cost Data manual					
	Capital Recovery Factor (system) = 0.1740 x TCI (Assumes 8% compound interest rate and system useful life of 10 years)				
Atomized Annual Costs = Annual O&M Costs + System Capital Recovery					
Amortized Annual Costs				$2,186,661.34	$2,329,098
Tons VOC Removed =				163.98	158.73
Cost per Ton Removed =				**$ 13,334**	**$14,674**

The new cost effectiveness from this modification will not result in a significant increase in VOC emissions per ton removed as shown above. In addition, incremental cost will not be affected by this change.

Instruments Panel Coating (PO-03)

Even though the instrument panel coating will be included in the plastic parts operation, it is still subject to PSD BACT.

Emission Limit	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: 2.3 lb/gal less water equivalent to 12.58 lb/gacs (daily vol. weighted average)	Low VOC material	Not Yet Issued	Honda Manufacturing of Indiana, LLC - Greensburg, IN	BACT
Original BACT:	Low VOC material	10/19/06	Honda Manufacturing	BACT

Emission Limit	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
2.3 lb/gal less water equivalent to 12.58 lb/gacs (daily vol. weighted average)			of Indiana, LLC - Greensburg, IN	
3.0 lb/gal less water 15.8 lb/gacs (no ave. time)	Low VOC material	1/12/99	Ford Visteon, Utica Plant	BACT
Interior Parts or Instrument Panel – 49.13 lb/gacs (daily volume weighted average)	Low VOC material	8/9/96	Toyota Motor Manufacturing, Indiana, Inc. – Princeton, IN	BACT
Combined with Plastic Painting – 3.2 lb/gal coating (averaging time is not specified)	Low VOC material	6/21/04	Toyota Motor Mfg. Texas, Inc. - San Antonio, TX	BACT

Honda is not proposing any change to the BACT determination for instrument panel painting as a result of this modification. The process will continue to use waterborne coatings and meet the BACT emission limit of 2.3 lb VOC/gallon less water of coating applied, which is still the most stringent BACT for this operation.

Plastic Parts Coating Line (PO-02)

The inclusion of the instrument panel coating operation into the fascia/bumper now referred to as plastic parts coating line will not affect the original BACT determination as shown in the table below:

Plastic Parts Coating				
Emission Limit	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: Primer: 0.90 lb VOC/gal Basecoat: 1.15 lb VOC/gal Clearcoat: 3.25 lb VOC/gal (All based on daily vol. weighted average)	Use of waterborne primer and waterborne/solventborne basecoat Control of clearcoat booth and topcoat oven emissions with RTO 95% DRE	Not yet issued	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Original BACT: Primer: 0.90 lb VOC/gal Basecoat: 1.15 lb VOC/gal Clearcoat: 3.25 lb VOC/gal (All based on daily vol. weighted average)	Use of waterborne primer and waterborne/solventborne basecoat Control of clearcoat booth and topcoat oven emissions with RTO 95% DRE	10/19/06	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Primer: 0.90 lb/gal Basecoat: 1.15 lb/gal Clearcoat: 3.25 lb/gal (All based on daily vol. weighted average)	Thermal oxidizer control of curing oven 95% DRE	6/9/06	SIA/Toyota Lafayette, IN	BACT
3.2 lb VOC/gallon (averaging time not specified)	Control of plastic bumper ovens 95% DRE Waterborne primer and basecoat	6/21/04	Toyota Motor Mfg. Texas, Inc. - San Antonio, TX	BACT
Primer: 1.3 lb/gal	Low VOC content coatings	10/18/02	Honda Mfg. of	BACT

Plastic Parts Coating				
Emission Limit	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Basecoat: 4.3 lb/gal Clearcoat: 4.0 lb/gal (All based on monthly vol. weighted average)	Good work practices		Alabama LLC - Talladega Co., AL	
Primer: 1.3 lb/gal Basecoat: 4.3 lb/gal Clearcoat: 4.0 lb/gal (averaging time not specified)	Good operating practices Waterborne primer Control of emission from oven	4/2/01	Nissan North America - Madison Co., MS	BACT

Honda is not proposing any change to the BACT determination as a result of this modification. It is still the most stringent BACT for this operation.

<u>Plastic Parts Touch-Up Booth (PO-17)</u>

The plastic parts touch-up booth is a new proposed unit. Cup guns and brush touch-up will be used for repair of minor plastic parts paint defects.

There were no previous BACT determinations found in the RBLC for plastic parts/touch-up/repair booths.

Step 1: Identification of control technologies for the plastic parts touch-up booth:

See Step 1 for the body painting operations. The same evaluation applies to VOC emissions from paint touch-up/repair operations.

Step 2: Evaluation of Most Effective Controls:

Combustion Economic Analysis

The plastic parts touch-up booth is a small booth in which cup guns and brush touch-up will be used for repair of minor plastic parts paint defects. Significant defects cannot be repaired due to color match difficulties. All coating in the booth will be manual. Use of combustion control technology would require the venting of the exhaust system to the proposed regenerative thermal oxidizer, increasing the size by approximately 20% due to the increased air flow. Because the overall emissions from the plastic parts touch-up booth are quite small (0.12 tons/year), the annualized cost of the exhaust systems, increased size of the combustion control system and related ancillary equipment, as well as annual energy operating costs would be cost prohibitive.

Step 3: Selection of BACT:

There were no previous BACT determinations found in the RBLC for plastic parts touch-up/repair booths. All determinations listed below are for metal parts touch-up/repair booths. Because the substrates are different, necessitating the usage of different coating technology, the limits cannot be directly comparable. However, typical BACT limits for these small emission units are expressed in terms of mass emission per day or per rolling 12-month time period.

Emission Limit	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
proposed BACT: 10 lb/day; 0.12 tons/year	None	Not Yet Issued	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
1.76 lb/hour; 2 tons/year; 4.8 lb/gallon vol. wt.	None specified	9/2/2004	OH-0279 Daimler Chrysler Lucas Co., OH 43612	BACT/LAER
54.9 lb/day; 4.2 tons/year	None specified	4/2/02	MI-0351 GM Lansing Craft Centre Ingham Co., MI 48917	BACT
1167 lb/day; 11 tons/year; 4.8 lb/gallon vol. wt.	None specified	9/26/01	MI-0326 GM Delta Township Eaton Co., MI 48262	BACT

Honda proposes a PSD BACT limit of 10 lbs per day, which is the most stringent from the sources in the above table even it is not comparable due to the difference in operation.

(C) Petroleum Liquid Storage in Fixed Roof Tanks:

Honda was permitted to install one (1) brake fluid storage tank, with a capacity of 4,000 gallons and one (1) windshield washer storage tank, with a capacity of 4,900 gallons. Honda proposes to install tanks with a capacity of 2,000 gallons, each, instead.

Step 1: Identification of control technologies for the Petroleum Liquid Storage Tanks:

Due to the low volatility of the materials, the size of the proposed storage tanks and the anticipated throughput, use of fixed roof tanks with submerged fill is the only technically feasible control option.

Step 2: Evaluation of Most Effective Controls:

The most stringent control technologies identified in practice for the fixed roof petroleum storage tanks are listed below:

Process	Emission Limit	Control Technology
Fixed roof petroleum liquid storage tanks	No emission limit	Fixed roof tank Submerged fill

Step 3: Selection of BACT:

Emission Limit	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: No Emission Limit	Fixed Roof Tank Submerged Fill	Not Yet Issued	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Original BACT: No Emission Limit	Fixed Roof Tank Submerged Fill	10/19/06	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
0.15 lb/hr maximum	Submerged fill pipe	6/13/2005	Martco Limited Partnership Oakdale OSB Plant Allen Co. LA	BACT
No emission limit	Submerged fill pipe	10/13/2004	WE Energies Port Washington Generating Station Washington Co. WI	BACT
No emission limit		5/23/02	SCE&G Jasper County Generating Facility Jasper Co. SC	LAER
No emission limit	No controls feasible (110 mmgal/year)	12/20/02	SC Electric and Gas Company – Urquhart Station Aiken Co. SC	BACT
0.025 lb/hr	No controls feasible	2/21/2000	Coastal Power Company Bastrop Clean Energy Center Bastrop Co. TX	BACT

Honda proposes to comply with the original BACT requirement, which is the most stringent for storage tanks of this size.

(D) Combustion – Natural Gas

Honda proposes to change the size, design, and the number of space heating units. This modification will have no impact on the original BACT determination.

Step 1: Identification of control technologies:

There are no technologies other than what was evaluated in the original BACT that reduce VOC emissions from the combustion of natural gas.

Step 2: Evaluation of Most Effective Controls:

The most stringent control technologies identified in practice for natural gas combustion are listed below:

Process	Emission Limit	Control Technology
Natural Gas combustion in small burners	0.0054 lb/MMBTU	Use of natural gas

Step 3: Selection of BACT:

Operations	Emission Limits	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: Natural Gas combustion in small burners	0.0054 lb/MMBTU	Use of Natural Gas	Not Yet Issued	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Original BACT: Natural Gas combustion in small burners	0.0054 lb/MMBTU	Use of Natural Gas	10/19/06	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
13.3 MMBTU/hr dryer burner	0.007 lb/MMBTU as annual average	No control	9/14/04	LA-0186 Graphic Packaging International, Inc. LA 71294	BACT
Ovens	0.0054 lb/MMBTU	No control	9/2/04	OH-0280 Daimler-Chrysler Lucas Co, OH	LAER
9.6 MMBTU/hr dryer burner	0.007 lb/MMBTU as annual average	No control	11/05/03	LA-0186 Graphic Packaging International, Inc. Ouachita Co., LA 71294	BACT
Natural gas combustion	4.6 tons/year	No control	1/14/03	OH-0295 GM-Moraine Montgomery Co., OH	OTHER
Heaters, non-boiler	0.0055 lb/MMBTU	No control	9/26/01	MI-0326 GM Eaton Co., MI	BACT

Honda proposes to keep the original BACT limit. It is the most stringent for space heating units.

BACT for Particulate (PM and PM10):

The proposed modification affects the following particulate emission sources:

1. Body Painting Operation
2. Plastics Painting
3. Plastic Parts Touch-up Booth
4. Body Welding and Finishing
5. Natural Gas Combustion
6. Emergency/Back-up Generators

(A) Body Painting Operation:

1. Sealer/Deadener Process

This operation is a caulking process. It has no particulate emissions associated with it.

2. Primer/Surfacer Coating Line

The sealed and deadened vehicle will be cured in the primer/surfacer coating oven which then follows the primer/surfacer application. This proposed change in operation will not affect the PM/PM10 emissions emitted by the Primer/Surfacer Coating Line.

Operations	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/ LAER
Proposed BACT: Primer Surfacer -	Water/oil emulsion wash filtration and a secondary dry filter, with grain loading of 0.0015 gr/scf and a combined control efficiency of 99%	Not Yet Issued	Honda Manufacturing of Indiana, LLC –Greensburg, IN	BACT
Original BACT: Primer Surfacer -	Water/oil emulsion wash filtration and a secondary dry filter, with grain loading of 0.0015 gr/scf and a combined control efficiency of 99%	10/19/06	Honda Manufacturing of Indiana, LLC –Greensburg, IN	BACT
Primer Surfacer Booth	Venturi Scrubber 98.5% 6.7 tons/yr PM/PM10 limit	3/18/05	Volvo Trucks North America, Inc.	BACT
Primer Surfacer booths	Wet abatement 98% efficient	6/21/04	Toyota Motor Mfg. Texas, Inc. - San Antonio, TX	BACT

Honda is not proposing any change to the BACT determination as a result of this modification. It is still the most stringent BACT for this operation.

3. Topcoating

The change in the topcoat ovens as detailed in the VOC BACT does not impact Particulate emissions.

Operations	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/ LAER
Proposed BACT: Topcoat Coating Lines	Water/oil emulsion wash filtration and a secondary dry filter, with grain loading of 0.0015 gr/scf and a combined control efficiency of 99%	Not Yet Issued	Honda Manufacturing of Indiana, LLC –Greensburg, IN	BACT
Original BACT: Topcoat Coating Lines	Water/oil emulsion wash filtration and a secondary dry filter, with grain loading of 0.0015 gr/scf and a combined control efficiency of 99%	10/19/06	Honda Manufacturing of Indiana, LLC –Greensburg, IN	BACT
Topcoat booths	Waterwash Filtration 0.0015 gr/scf	9/2/04	Daimler-Chrysler - Lucas Co, OH	LAER
Topcoat booths	Wet abatement 98% efficient	6/21/04	Toyota Motor Mfg. Texas, Inc. - San Antonio, TX	BACT
Topcoat booths	Wet scrubber and preabatement filtration	1/14/03	GM-Moraine - Montgomery Co., OH	BACT
Topcoat Lines	Wet Scrubbers in form of downdraft waterwash 99.1% efficient	4/2/01	Nissan North America - Madison Co., MS	BACT

Honda is not proposing any change to the BACT determination as a result of this modification. It is still the most stringent BACT for this operation.

(B) Plastic Painting Operation:

The change in the plastic painting operation due to the inclusion of instrument panel coating will not affect the particulate emissions from the plastic painting operation, since the instrument panel emissions is minimal, 0.4 tons per year.

Operations	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/ LAER
Proposed BACT: Plastic Parts Coating	Water/oil emulsion wash filtration, with outlet grain loading of 0.0015 gr/scf and 99% control efficiency	Not Yet Issued	Honda Manufacturing of Indiana, LLC –Greensburg, IN	BACT
Original BACT: Plastic Parts Coating	Water/oil emulsion wash filtration, with outlet grain loading of 0.0015 gr/scf and 99% control efficiency	10/19/06	Honda Manufacturing of Indiana, LLC –Greensburg, IN	BACT
Bumper Operations	Wet abatement 98% efficient	6/21/04	Toyota Motor Mfg. Texas, Inc. - San Antonio, TX	BACT
Bumper Operations	No Control	7/30/04	Toyota Motor, KY	BACT

Honda is not proposing any change to the BACT determination which is still the most stringent for the plastic parts coating operation as a result of this modification.

(C) Plastic Parts Touch-Up Booth:

The plastic parts touch-up booth is a new proposed unit. Cup guns and brush touch-up will be used for repair of minor plastic parts paint defects.

Step 1: Identification of control technologies:

Atomized painting operations typically generate particulate emissions in the form of paint overspray. There are two types of particulate control technologies that can be applied to painting processes, namely wet scrubbers and dry filters. High volume, continuous automobile coating lines typically utilize wet scrubbers in the form of waterwash systems for particulate control for spray painting operations. The waterwash systems are capable of very high particulate removal efficiencies, typically above 99%. In addition, the waterwash systems help maintain required booth humidity levels. For automobile primer/surfacer and topcoating operations and for automobile bumper painting operations, Honda is not aware of any other available control technology that would further reduce emissions of particulate.

Smaller volume, intermittent spray coating operations typically utilize dry filteration systems for particulate removal. These systems generally are capable of achieving very high removal efficiencies.

Step 2: Evaluation of Most Effective Controls:

Based on previous BACT determinations for this operation, the BACT control for the plastic touch-up operation to be dry filtration system.

Step 3: Selection of BACT:

BACT for PM for painting operations is proposed as shown in the following table:
Painting Operations – Minor

Operations	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: plastic parts touch up booth	Dry Filtration - 99%	Not Yet Issued	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Off-line Repair booths Off-Line Repair booth w/IR Blackout Spray Booth Interior touch-up	Dry Filter 98% efficient	9/2/04	Daimler-Chrysler Lucas Co, OH	BACT
Interior parts; Paint Line booths and Repair booth Offline repair booths	Dry filteration 80-90% efficient Dry filtration 50% efficient	6/21/04	Toyota Motor Mfg. Texas, Inc. San Antonio, TX	BACT
Final Repair	Fabric Filter	1/14/03	GM-Moraine Montgomery Co., OH	BACT
Stoneguard coating booth Touch-up, Online Spot, Tutone Mask, Underbooth Coat	Dry filters 98% efficient	4/2/01	Nissan North America Madison Co., MS	BACT

Honda proposes the most stringent particulate control technology for the plastic parts touch up booth as reflected in the above table.

(D) MIG Welding D-Zone and MIG Welding Manual Backup/Repair:

Honda proposes to add a stationary robotic welding station identified as "SR station", where 4 MIG robots will weld together the main body components of the vehicle.

Step 1: Identification of control technologies:

Welding operations generate particulate emissions in the form of fumes formed by the vaporization and condensation of metallic elements upon cooling in ambient air. The particulate formed is typically submicron in size (50% to 75% of the particles have diameters ranging from 0.4 to 0.8 µm). Automated welding process fumes are usually captured using forced air removal from the welding booth, while manual welding uses portable ducts or hoods. Once the fume is collected it is delivered to either a high efficiency filter or an electrostatic precipitator (ESP) for removal of particulates. Particulate scrubbers are generally a less efficient means of removing welding fumes. High efficiency filters have minimum efficiency ratings greater than 99% for submicron particulate matter. Efficiencies for new ESPs may also be greater than 99%; however, they have difficulty collecting particles with aerodynamic diameters between 0.1 and 1.0 µm. Because the majority of welding fume particles fall into this range, lower efficiencies are expected for ESPs controlling welding fumes.

Step 2: Evaluation of Most Effective Controls:

Based on the previous BACT determination for this operation, the BACT control for the SR station operation to be dry filtration system.

Honda intends to control the MIG Welding SR Station and Backup (89% of the plant welding) with dry filters; however, due to scattered locations around the plant, the remaining 11% of welding operations are not easily ducted to the filters. Honda evaluated the economic feasibility of ducting these additional welding operations to the filters. The cost analysis is based on capital cost of the ductwork for MIG Welding D-Zone operations, which make up 10% of the 11% uncontrolled welding operations. Ductwork to the filters from the remaining 1%, associated with MIG Welding Manual Backup/Repair, would cost as much or more than the D-Zone ductwork due the number of stations and their scattered locations around the plant. Honda conservatively assumed the operating costs would remain constant for the filters with or without the additional ductwork and particulate loads.

Based on the economic evaluation, ducting the D-Zone MIG Welding and the Manual and Backup MIG Welding to the filters was determined not to be cost-effective at over $200,000 per ton of pollutant removed.

Step 3: Selection of BACT:

BACT for PM for the D-Zone MIG Welding and the Manual and Backup MIG Welding is shown in the following table and is consistent with entries in the RBLC for similar sources:

Operations	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: MIG Welding Operation	Dry Filteration	Not Yet Issued	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Original BACT: MIG Welding Operation	Dry Filteration	10/19/06	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Welding Shop	None	10/19/2004	Wisconsin Public Service / Marathon Co., WI	BACT
Body Shop	Dry Filter, 95%	9/30/02	BMW	BACT

Operations	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
for Vehicle Sub-assembly (Welding)			Manufacturing, Corp., S.C.	
Finish Welding	None	08/31/2004	Daimler Chrysler Corp. / Lucas Co, OH	BACT
Welder	None	02/05/1999	BP Exploration Inc. / Juneau, AK	Other

(C) Combustion – Natural Gas

Honda proposes to change the size, design, and the number of space heating units. This modification will have no impact on the original BACT determination.

Step 1: Identification of control technologies:

There are no additional technologies to reduce particulate emissions from combustion of natural gas.

Step 2: Evaluation of Most Effective Controls:

The most stringent control technologies identified in practice for natural gas combustion are listed below:

Process	Emission Limit	Control Technology
Natural Gas combustion in small burners	0.0075 lb/MMBTU	Use of natural gas

Step 3: Selection of BACT:

Operations	Emission Limits	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: Natural Gas combustion in small burners	0.0075 lb/MMBTU	Use of natural gas	Not Yet Issued	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Original BACT: Natural Gas combustion in small burners	0.0075 lb/MMBTU	Use of natural gas	10/19/06	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Air supply units	0.0075 lb/MMBTU	No control	9/2/04	Daimler-Chrysler	LAER

Operations	Emission Limits	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
				Lucas Co, OH	
Natural gas combustion	0.02 lb/MMBTU	No control	1/14/03	GM-Moraine Montgomery Co., OH	BACT
Heaters, non-boiler	0.008 lb/MMBTU	No control	9/26/01	GM-Delta Township Eaton Co., MI	BACT

Honda proposes to keep the original BACT limit. It is the most stringent for space heating units.

(D) Combustion –– Generators

Honda proposes to add two (2) emergency generators, with a rating capacity of 81 kilowatts, each. Honda also proposes to increase the size of several emergency generators.

Step 1: Identification of control technologies:

New requirements are being developed by USEPA for stationary compression ignition internal combustion engines. This has driven the introduction of significantly cleaner diesel generator sets and fire pumps. New generator sets can achieve Tier 3 compliance, which is currently the maximum reduction available for engine design control strategies. To reach a lower level of PM emissions, aftertreatment and the use of ultra low sulfur diesel fuel is required. Diesel particulate matter traps can physically capture PM emissions from the exhaust stream.

Step 2: Evaluation of Most Effective Controls:

The Tier 3 emission limitations for generator sets and the NSPS limitations for stationary fire pumps represent the most stringent in-engine control technologies available.

Aftertreatment is not an economically feasible alternative for emergency and back-up generators limited to no more than 500 operating hours/year.

Step 3: Selection of BACT:

Emission Limit	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: Diesel generator between 100 and 175 hp (Model Year (MY) 2007 or later): 0.22 gram/horsepower-hour (g/hp-hr) Diesel generator between 175 and 750 hp (MY2007 or later): 0.15 g/hp-hr Emergency Fire Pump between 175 and 750 hp (MY2008 or later): 0.4 g/hp-hr	Use of Ultra Low Sulfur Diesel (ULSD)	Not Yet Issued	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Original BACT: Diesel generator between 100 and 175 hp (Model Year (MY) 2007 or later): 0.22 gram/horsepower-hour (g/hp-hr) Diesel generator between 175 and 750 hp (MY2007 or later): 0.15 g/hp-hr Emergency Fire Pump between 175 and 750 hp (MY2008 or later): 0.4 g/hp-hr	Use of Ultra Low Sulfur Diesel (ULSD)	10/19/06	Honda Manufacturing of Indiana, LLC – Greensburg, IN	BACT
Emergency Generator 0.0022 lb/hp-hr or 1 g/hp-hr	Good combustion	10/21/2005	Dalitalia LLC - OK-0110	
Emergency Generator & Fire pump (Hp not specified) 1.14 lb/hour	No controls	9/29/2005	Forsyth Energy Projects LLC - NC-0101	BACT
Fire Pump 0.66 lb/hr 1.1 g/hp-hr Back-up Generator 0.59 lb/hr 0.40 g/hp-hr (fire pump)	No controls	12/28/2004	Duke Energy Hanging Rock LLC - OH-0252	BACT
Fire Pump (460 Hp) 1.01 lb/hr (equivalent 1.0 g/hp-hr) 200 hours/rolling 12-months Booster Pump (265 Hp) 0.58 lb/hr (equivalent 1.0 g/hp-hr) 200 hours/rolling 12-months	Good combustion ULSD (0.003%)	10/19/2004	Wisconsin Public Service - WI-0228	BACT

Emission Limit	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Diesel Generator (Hp not specified) 0.89 lb/hr 500 hours/rolling 12-months	Low sulfur diesel (0.05%)	10/13/2004	WE Energies Port Washington Generating Station - WI-0227	BACT

Honda is not proposing any change to the BACT determination. It is still the most stringent for the emergency generators added as part of this modification.

BACT for Nitrogen Oxides (NOx):

(A) Natural Gas Combustion (small heaters, with heat input capacity <20 MMBTU/hr):

Step 1: Identification of control technologies:

Five control technologies were identified to reduce NOx emissions from small, natural gas fired heaters: selective catalytic reduction (SCR), selective non-catalytic reduction (SNCR), low-NOx burners, flue gas recirculation, and steam injection.

Based on a review of technical literature and discussion with equipment vendors, Honda believes that selective catalytic reduction (SCR), selective non-catalytic reduction (SNCR) and steam injection are not technically feasible for controlling NOx emissions from small indirect and direct fired heaters. In addition, flue gas recirculation for direct fired burners is not technically feasible.

Step 2: Evaluation of Most Effective Controls:

Based on technological feasibility evaluation of control technologies for small, natural gas fired heaters, the only technology technically feasible is the use of low-NOx burners (Low NOx burners may also utilize flue gas recirculation). In the original BACT analysis, Honda evaluated the economic feasibility of various lower-NOx emitting burners based on information provided by vendors.

<u>Space Heat/HVAC Burners</u>

For direct-fired burners, the analysis was based on using the APX w/SL burner technology from Maxon Corporation. At the time, Maxon had provided Honda with a NOx emission rate for the APX w/SL direct-fired line burners of 0.06 lb/MMBtu. However, Maxon has indicated that the NOx emission rate originally provided was based on "best" laboratory firing performance at the design maximum firing rate and optimal temperature rise, air velocity and excess air ratios. Maxon recently provided Honda with alternate emission rates for the APX w/SL burners that they will certify during typical loaded operation.

For the APX w/SL burner, the emission rate is 0.08 lb NOx/MMBtu.

For the indirect fired space heat/HVAC burners, the analysis was based on three increasingly lower NOx emitting burners - a standard burner, with an emission rate of 0.1 lb NOx/MMBtu, a 30 ppm NOx burner and the MPAKT with mechanical control burner. The cost analysis indicated that for very small burners less than approximately 0.255 MMBtu/hr heat input capacity, the standard 0.1 lb NOx/MMBtu burner was appropriate. For applications where the burner heat input capacity ranged from about 0.255 MMBtu/hr up to about 1.7 MMBtu/hr heat input capacity, the 30 ppm NOx burner was appropriate. For applications where the burner maximum heat input capacity exceeded 1.7 MMBtu/hr, the MPAKT burner was appropriate.

<u>Paint/Plastics Booth Air Supply House Burners</u>

For direct-fired burners, the analysis was based on using the APX w/SL burner technology from Maxon Corporation. At the time, Maxon had provided Honda with a NOx emission rate for the APX w/SL direct-fired line burners of 0.06 lb/MMBtu. However, Maxon has indicated that the NOx emission rate originally provided was based on "best" laboratory firing performance at the design maximum firing rate and optimal temperature rise, air velocity and excess air ratios. Maxon recently provided Honda with alternate emission rates for the APX w/SL burners that they will certify during typical loaded operation.

For the APX w/SL burner, the emission rate is 0.08 lb NOx/MMBtu.

Paint/Plastics Heater/Bake Oven Burners

In the original BACT analysis for the burners used for heated flash off areas and bake ovens, ultra-low NOx burners with an emission rate of 0.02 lb/MMBtu were determined by Honda to be economically feasible. An additional ultra-low NOx burner with an improved control system and an emission rate of 0.01 lb/MMBtu was also evaluated. These burners were determined to not be economically feasible. Cost for the enhanced control ultra-low NOx burner ranged from approximately $11,000 per ton of NOx reduced to $49,000 per ton.

The original analysis did not consider the additional natural gas that would be consumed due to the excess air of the lower NOx burners. Honda has redone the analysis and included the annual cost of the additional natural gas usage during production. With the additional natural gas cost, the ultra-low NOx burners are not economically feasible for indirect fired oven burners. Costs ranged from approximately $55,000/ton to 137,000/ton of NOx reduced.

Based on this evaluation, Honda is proposing to use burners with a slightly higher NOx emission rate of 0.048 lb/MMBtu for the indirect fired heated flash and oven burners. Honda will continue to utilize the ultra-low NOx burners for the oven burners that are direct fired.

Step 3: BACT Determination:

Emission Unit	NOx Emission Limits	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: FAC-01 through FAC-07, FAC-11 through FAC-19, FAC-35, FAC-116, PA-05 air supply house, PA-06 air supply house, PA-07 air supply houses, PA-21 through PA-26, PO-02 air supply house	0.08	Low NOx Burners	Not Yet issued	Honda of Indiana Manufacturing, LLC	BACT
FAC-20, FAC-26, FAC-28, FAC-29, FAC-32, FAC-37, FAC-41, FAC-43 through FAC-52, FAC-140, FAC-146, FAC-147, PA-20	0.04				
FAC-27, FAC-30, PA-02 bake oven, PA-05 bake oven zones 3, 4 and 5, PA-07 topcoat oven zones 3, 4 and 5, PA-07 repair oven, PO-02 bake oven zone 2	0.02				
PA-05 flash off heaters 1 and 2, PA-05 bake oven zones 1 and 2, PA-07 basecoat flash off heaters 1 and 2, PA-07 topcoat bake oven zones 1 and 2, PO-02 bake oven zone 1	0.048				
FAC-36, FAC-39, FAC-40, FAC-53 through FAC-80, FAC-110, FAC-117 through FAC-139, FAC-148 through FAC-170, 3 regenerative thermal oxidizers	0.10				
Original BACT: FAC-43 through FAC-50	0.73 lb/MMBtu	Low NOx burners	10/19/06	Honda of Indiana Manufacturing, LLC	BACT
FAC-02 through FAC-10; FAC13 through FAC-15, FAC-17 through FAC-20, FAC-26 through FAC-32, FAC-35, FAC-36	0.02 lb/MMBtu	Low NOx burners			
FAC-33, FAC-34, FAC-37 through FAC-42	0.04 lb/MMBtu	Low NOx burners			

Emission Unit	NOx Emission Limits	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
PA-04 (E-Coat inspection ASH), PA-05 (Surfacer ASH), PA-06 (Surfacer Inspection ASH), PA-07 (Basecoat #1 & #2 ASH, Clearcoat #1 & #2 ASH, and Repair ASH), PA Working Area ASH, PA-11 (W/H Black & F/Repair ASH), PO-02 (ASH) , PO-03 (ASH), FAC-87 (PO HVAC), FAC-21 through FAC-24 (PA HVAC), FAC-01, FAC-11, FAC-12, FAC-16	0.06 lb/MMBtu	Low NOx burners			
PA-03, PA-05, PA-07, PO-02 and PO-03 (burners for heated flash areas and drying ovens), FAC-25 (Paint Mix HVAC)	0.02 lb/MMBtu	Low NOx burners			
PA-20 (process water heaters)	0.04 lb/MMBtu				
FAC-53 through FAC-80 (unit heaters), FAC-111 and FAC-112 (café water heaters), PO-13	0.10 lb/MMBtu				
None		None specified		Toyota Motor San Antonio,Texas	BACT
Unit size not identified	0.085 lb/MMBTU	Low NOx burners	9/2/04	Daimler-Chrysler - Lucas Co., Ohio	LAER
Unit size not identified	0.10 lb/MMBTU	Low NOx burners Natural gas fuel	3/23/04	Hyundai Motor Mfg. - Montgomery Co, AL	BACT
Unit size not identified	0.10 lb/MMBTU	Low NOx burners Natural gas fuel	10/18/02	Honda Mfg., of Alabama, LLC - Talledega Co., AL	BACT
Unit size not identified	0.08 lb/MMBTU	Natural gas fuel	9/26/01	GM-Delta Township - Eaton Co, MI	BACT
Unit size not identified	0.10 lb/MMBTU	Natural gas fuel	10/13/04	WE Energies - Washington Co., WI	NA
Unit size not identified	RTO – no limit	Low NOx burners Natural gas fuel only	3/17/99	BMW Manufacturing Corp. - Spartanburg Co., S.C.	BACT

Space Heat/HVAC Burners

The BACT emission limit for direct fired burners is proposed at 0.08 lb NOx/MMBtu, based on the APX w/SL burner revised emission performance data. The NP-LE burner can also achieve the 0.08 lb NOx /MMBtu emission rate at a derated performance level of up to 600,000 Btu/ft of burner. Honda is proposing to use the derated NP-LE burners for all direct fired HVAC applications. The derating of the NP-LE burners will be accomplished by the permanent installation of a properly sized orifice plate in the gas train for the burner.

Originally, Honda proposed for many of the larger HVAC units to employ indirect burner technology. Honda proposes to utilize direct fired burners to significantly improve overall energy efficiency since it will eliminate the losses associated with heat exchangers.

The BACT emission limits for indirect fired burners are proposed to remain the same as the original BACT analysis. Limits for individual burners have been modified because many burner sizes have changed.

Paint/Plastics Booth Air Supply House Burners

Honda proposes the BACT emission limit for direct fired burners to be 0.08 lb/MMBtu. It is based on the APX w/SL burner revised emission performance data. The NP-LE burner can also achieve the 0.08 lb NOx/MMBtu emission rate at a derated performance level of up to 600,000 Btu/ft of burner. Honda proposes to use the derated NP-LE burners for all direct fired HVAC applications. The derating of the NP-LE burners will be accomplished by the permanent installation of a properly sized orifice plate in the gas train for the burner.

Paint/Plastics Heater/Bake Oven Burners

Honda proposes to use burners with a NOx emission rate of 0.048 lb/MMBtu for the indirect fired heated flash and oven burners. Honda will continue to utilize the ultra-low NOx burners (emission rate 0.02 lb/MMBtu) for the oven burners that are direct fired Paint/Plastics Heater/Bake Oven Burners.

See attached burner summary table for the original BACT determination and the proposed revised BACT determination and Paint/Plastics NOx BACT Economic analysis pages 1 through 11.

(B) Combustion – Generators

Honda proposes to change the size of several generators and add two (2) emergency generators. Honda requests to revise the original limit for diesel generators with capacity between 175 hp to 750 hp for 2007 calendar year or later. Honda proposes to comply with the family emission limit under NSPS (40 CFR 60, Subpart IIII) [Standards of Performance for Stationary Compression Ignition Internal Combustion Engines].

Step 1: Identification of control technologies:

New requirements are being developed by USEPA for stationary compression ignition internal combustion engines. This has driven the introduction of significantly cleaner diesel generator sets and fire pumps. New generator sets can achieve Tier 3 compliance, which is about the maximum reduction available for engine design control strategies. To reach a lower level of NOx emissions, aftertreatment and the use of ultra low sulfur diesel fuel is required. Selective catalytic reduction (SCR) systems incorporating aqueous urea injection into the exhaust stream passing over a suitable catalyst can reduce NOx further. Systems consist of a SCR catalyst, urea injection system, urea tank, pump, and a control system.

Step 2: Evaluation of Most Effective Controls:

The Tier 3 emission limitations for generator sets and the NSPS limitations for stationary fire pumps represent the most stringent in-engine control technologies available.

Aftertreatment is not an economically feasible alternative for back-up generators limited to no more than 500 operating hours/year or emergency stationary fire pumps.

Step 3: Selection of BACT:

Emission Unit	Emission Limit (NOx + NMHC)	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Proposed BACT: Diesel generator between 100 and 175 hp (Model Year (MY) 2007 or later)	3 grams/hp-hr (g/hp-hr)	In engine Use of (ULSD)	Not Yet Issued	Honda of Indiana Manufacturing, LLC	BACT
Diesel generator between 175 and 750 hp (MY2007 or later):	4.5 g/hp-hr	In engine Use of ULSD			
Emergency Fire Pumps between 175 and 750 hp (MY2008 or later):	7.8 g/hp-hr	Use of ULSD			
Original BACT: Diesel generator between 100 and 175 hp (Model Year (MY) 2007 or later)	3 grams/hp-hr (g/hp-hr)	Use of Ultra Low Sulfur Diesel (ULSD)	10/19/2006	Honda of Indiana Manufacturing, LLC	BACT
Diesel generator between 175 and 750 hp (MY2007 or later):	3 g/hp-hr	Use of ULSD			
Emergency Fire Pumps between 175 and 750 hp (MY2008 or later):	7.8 g/hp-hr	Use of ULSD			
Emergency Generator 1500 kw	4.5 g/hp-hr	Any combination - not specified directly	6/29/2007	Archer Daniels Midland Linn Co, IA 52404 IA-0088	BACT
Two Emergency Generators 1341 hp & 671 hp	0.031 lb/hp-hr (14.06 g/hp-hr)	Good combustion practices; low sulfur (<15 ppmv)	12/27/2006	Marathon Petroleum Co. St. John the Baptist Co., LA LA-0211	BACT
Emergency Generator 317 BHP	3.66 g/hp-hr	Good combustion practices	3/10/2006	Dominion Cove Point LNG, LP MD-0036	BACT

Emission Unit	Emission Limit (NOx + NMHC)	Control Technology	Permit Issuance Date	Company Name/Location	Basis: BACT/LAER
Emergency Generator 24.1 MMBtu/hr throughput	84.8 lb/hr	Intermittent operations	10/18/2005	Kansas City Board of Public Utilities Wyandotte Co., KS 99734 KS-0028	BACT
Emergency Generator 11.4 MMBtu/hr throughput	36.48 lb/hr 7.7 g/hp-hr	No controls	9/29/2005	Forsyth Energy Projects LLC NC-0101	BACT
IC Engine Generator 1,855 hp	No emission limit	Good combustion practices	8/19/2005	North Slope, AK 99734 AK-0062	BACT
Fire Water Pump 425 hp	8.9 lb/hr 9.5 g/hp-hr annual average	Pollution prevention	6/6/2005	Crescent City Power, LLC LA-0192	BACT
Emergency Generator 10.9 MMBtu/hr throughput	6.4 g/kw-hr (4.77 g/hp-hr)	Manufacturer certification	4/14/2005	Arizona Clean Fuels Yuma, LLC Yuma Co., AZ 85352 AZ-0046	BACT
Water Pump 265 hp Backup generator 500 kw	8.2 lb/hr 14 g/hp-hr 10.2 lb/hr 6.9 g/hp-hr	No controls	12/28/2004	Duke Energy Hanging Rock, LLC OH-0252	BACT
Main Fire Pump 460 hp	14.26lb/hr 200 hours/rolling 12-months	Good combustion ULSD (0.003%)	10/19/2004	Wisconsin Public Service WI-0228	BACT
Diesel Engine Generator 7.6 MMBtu/hr throughput	27.36 lb/hr 500 hours/rolling 12-months	Engine design Low sulfur diesel (0.05%)	10/13/2004	WE Energies Port Washington Generating Station WI-0227	BACT

The proposed BACT is the most stringent for the emergency generators added as part of this modification.

Emission Unit ID	Description	Maximum Heat Input (MMBTU/hr)	Original BACT Type	Original BACT Burner Technology	Original BACT Limit (lb/MMBTU)	Revised BACT Maximum Heat Input (MMBTU/hr)	Revised BACT Type	Revised BACT Burner Technology (or equivalent)	Revised BACT Limit (lb/MMBTU)
Facilities HVAC (Space Heat) Burners									
FAC-01	QUALITY/ASSEMBLY	5.184	Direct	APX w/SL	0.06	7.776	Direct	NP-LE derated	0.08
FAC-02	ASSEMBLY	3.780	Indirect	MPACK w/mech	0.02	4.147	Direct	NP-LE derated	0.08
FAC-03	ASSEMBLY	3.780	Indirect	MPACK w/mech	0.02	4.147	Direct	NP-LE derated	0.08
FAC-04	ASSEMBLY	3.780	Indirect	MPACK w/mech	0.02	4.147	Direct	NP-LE derated	0.08
FAC-05	ASSEMBLY	3.780	Indirect	MPACK w/mech	0.02	4.147	Direct	NP-LE derated	0.08
FAC-06	ASSEMBLY	3.780	Indirect	MPACK w/mech	0.02	4.147	Direct	NP-LE derated	0.08
FAC-07	ASSEMBLY	3.780	Indirect	MPACK w/mech	0.02	4.147	Direct	NP-LE derated	0.08
FAC-08	Not to be constructed (DELETED)								
FAC-09									
FAC-10									
FAC-11	MAT SERVICE SOUTH DOCKS	5.184	Direct	APX w/SL	0.06	2.592	Direct	NP-LE derated	0.08
FAC-12	MAT SERVICE NORTH DOCKS	5.184	Direct	APX w/SL	0.06	7.776	Direct	NP-LE derated	0.08
FAC-13	WELD	3.780	Indirect	MPACK w/mech	0.02	4.147	Direct	NP-LE derated	0.08
FAC-14	WELD	3.780	Indirect	MPACK w/mech	0.02	4.147	Direct	NP-LE derated	0.08
FAC-15	WELD	3.780	Indirect	MPACK w/mech	0.02	4.147	Direct	NP-LE derated	0.08
FAC-16	MAT SERVICE NORTH DOCKS	3.780	Direct	APX w/SL	0.06	7.776	Direct	NP-LE derated	0.08
FAC-17	STAMPING	3.780	Indirect	MPACK w/mech	0.02	2.765	Direct	NP-LE derated	0.08
FAC-18	STAMPING	3.780	Indirect	MPACK w/mech	0.02	2.765	Direct	NP-LE derated	0.08
FAC-19	PLASTICS	3.780	Indirect	MPACK w/mech	0.02	2.765	Direct	NP-LE derated	0.08
FAC-20	FAC HVAC	2.835	Indirect	MPACK w/mech	0.02	0.078	Indirect	30 ppm burner	0.04
FAC-21	Not to be constructed (DELETED)								
FAC-22									
FAC-23									
FAC-24									
FAC-25									
FAC-26	Prod Office Area C	1.282	Indirect	MPACK w/mech	0.02	0.620	Indirect	30 ppm burner	0.04
FAC-27	Welcome Center Locker Rooms	3.375	Indirect	MPACK w/mech	0.02	0.984	Indirect	MPACK w/mech	0.02
FAC-28	Welcome Center Area	2.160	Indirect	MPACK w/mech	0.02	0.640	Indirect	30 ppm burner	0.04
FAC-29	Adm Bldg.- Ground HVAC	1.701	Indirect	MPACK w/mech	0.02	0.705	Indirect	30 ppm burner	0.04
FAC-30	Adm Bldg. - Second Floor	2.700	Indirect	MPACK w/mech	0.02	1.359	Indirect	MPACK w/mech	0.02
FAC-31	Not to be constructed (DELETED)								
FAC-32	Kitchen HVAC	2.268	Indirect	MPACK w/mech	0.02	0.831	Indirect	30 ppm burner	0.04
FAC-33	Not to be constructed (DELETED)								
FAC-34									
FAC-35	WWT HVAC - General	1.814	Indirect	MPACK w/mech	0.02	1.650	Direct	NP-LE derated	0.08
FAC-36	WWT HVAC - Office	1.814	Indirect	MPACK w/mech	0.02	0.137	Indirect	Standard low-NOx	0.1

			Original BACT			Revised BACT			
Emission Unit ID	**Description**	**Maximum Heat Input (MMBTU/hr)**	Type	Burner Technology	Limit (lb/MMBTU)	Maximum Heat Input (MMBTU/hr)	Type	Burner Technology (or equivalent)	Limit (lb/MMBTU)
FAC-37	Distribution Center HVAC	0.826	Indirect	30 ppm burner	0.04	0.373	Indirect	30 ppm burner	0.04
FAC-38	Not to be constructed (DELETED)								
FAC-39	B116 Emergency Response	0.255	Indirect	30 ppm burner	0.04	0.116	Indirect	Standard low-NOx	0.1
FAC-40	Fire Living Quarters	0.345	Indirect	30 ppm burner	0.04	0.026	Indirect	Standard low-NOx	0.1
FAC-41	Railroad Bldg. HVAC	0.255	Indirect	30 ppm burner	0.04	0.300	Indirect	30 ppm burner	0.04
FAC-42	Not to be constructed (DELETED)								
FAC-43	CC Center HVAC	1.200	Direct	NP-LE	0.073	0.850	Indirect	30 ppm burner	0.04
FAC-44	CC Center HVAC	1.200	Direct	NP-LE	0.073	0.850	Indirect	30 ppm burner	0.04
FAC-45	CC Center HVAC	1.200	Direct	NP-LE	0.073	0.850	Indirect	30 ppm burner	0.04
FAC-46	CC Center HVAC	1.200	Direct	NP-LE	0.073	0.850	Indirect	30 ppm burner	0.04
FAC-47	CC Center HVAC	1.200	Direct	NP-LE	0.073	0.850	Indirect	30 ppm burner	0.04
FAC-48	CC Center HVAC	1.200	Direct	NP-LE	0.073	0.850	Indirect	30 ppm burner	0.04
FAC-49	CC Center HVAC	1.200	Direct	NP-LE	0.073	0.850	Indirect	30 ppm burner	0.04
FAC-50	CC Center HVAC	1.200	Direct	NP-LE	0.073	0.850	Indirect	30 ppm burner	0.04
FAC-51	CC Center Office HVAC	0.350	Indirect	30 ppm burner	0.04	0.250	Indirect	30 ppm burner	0.04
FAC-52	CC Center Locker Room	0.350	Indirect	30 ppm burner	0.04	0.450	Indirect	30 ppm burner	0.04
FAC-53-FAC-72	Unit Heaters (20 @ 0.13 MMBTU/each	0.125	Indirect	Standard low-NOx	0.1	0.130	Indirect	Standard low-NOx	0.1
FAC-73 - FAC-80	Unit Heaters (8 @ 0.1 MMBTU/each	0.375	Indirect	Standard low-NOx	0.1	0.100	Indirect	Standard low-NOx	0.1
FAC-87	Not to be constructed (DELETED)								
FAC-116	TRAINING CENTER					1.382	Direct	NP-LE derated	0.08
FAC-117 - FAC-130	Unit Heaters (14 @ 0.13 MMBTU/each					0.130	Indirect	Standard low-NOx	0.1
FAC-131	Main Substation HVAC					0.125	Indirect	Standard low-NOx	0.1
FAC-132	Main Substation HVAC					0.125	Indirect	Standard low-NOx	0.1
FAC-133 - FAC-139	Unit Heaters (7 @ 0.13 MMBTU/each					0.130	Indirect	Standard low-NOx	0.1
FAC-140	Credit Union HVAC					0.500	Indirect	30 ppm burner	0.04
FAC-141 - FAC-144	Not to be constructed (DELETED)								
FAC-146 and FAC-147	CC Building					0.250	Indirect	30 ppm burner	0.04
FAC-148 - FAC-150	CC Building					0.100	Indirect	Standard low-NOx	0.1

Emission Unit ID	Description	Maximum Heat Input (MMBTU/hr)	Original BACT			Revised BACT			
			Type	Burner Technology	Limit (lb/MMBTU)	Maximum Heat Input (MMBTU/hr)	Type	Burner Technology (or equivalent)	Limit (lb/MMBTU)
FAC-151 - FAC-169	CC Building					0.200	Indirect	Standard low-NOx	0.1
FAC-170	CC Building					0.046	Indirect	Standard low-NOx	0.1
Factilities Other Use Burners									
FAC-110	Café water heater	0.240	Indirect	Standard low-NOx	0.1	0.500	Indirect	Standard low-NOx	0.1
FAC-111	Not to be constructed (DELETED)								
Paint Process Burners									
PA-02	E-Coat Oven Preheat	5.175	Direct	MPACK w/mech	0.02	3.700	Direct	MPACK w/mech	0.02
	E-Coat Oven Zone 1	3.850	Direct	MPACK w/mech	0.02	3.700	Direct	MPACK w/mech	0.02
	E-Coat Oven Zone 2	2.750	Direct	MPACK w/mech	0.02	3.700	Direct	MPACK w/mech	0.02
	E-Coat Oven Zone 3	5.175	Direct	MPACK w/mech	0.02	3.700	Direct	MPACK w/mech	0.02
	E-Coat Oven Zone 4	5.175	Direct	MPACK w/mech	0.02	3.700	Direct	MPACK w/mech	0.02
	E-Coat Oven Zone 5	5.175	Direct	MPACK w/mech	0.02	3.700	Direct	MPACK w/mech	0.02
PA-03	Not to be constructed (DELETED)								
PA-04	Not to be constructed (DELETED)								
PA-05	Surfacer ASH Preheat	12.00	Direct	APX w/SL	0.06	7.00	Direct	APX w/SL	0.08
	Surfacer ASH Reheat	3.00	Direct	APX w/SL	0.06	0.80	Direct	NP-LE derated	0.08
	Surfacer Flash Off #1 Heater	3.85	Indirect	MPACK w/mech	0.02	3.50	Indirect	OP-LE	0.048
	Surfacer Flash Off #2 Heater	3.85	Indirect	MPACK w/mech	0.02	2.60	Indirect	OP-LE	0.048
	Surfacer Oven Zone 1	2.75	Indirect	MPACK w/mech	0.02	2.60	Indirect	OP-LE	0.048
	Surfacer Oven Zone 2	2.75	Indirect	MPACK w/mech	0.02	2.60	Indirect	OP-LE	0.048
	Surfacer Oven Zone 3	2.75	Indirect	MPACK w/mech	0.02	1.70	Direct	MPACK w/mech	0.02
	Surfacer Oven Zone 4	2.75	Indirect	MPACK w/mech	0.02	1.70	Direct	MPACK w/mech	0.02
	Surfacer Oven Zone 5	2.75	Indirect	MPACK w/mech	0.02	2.60	Direct	MPACK w/mech	0.02
PA-06	Surfacer Inspection ASH Preheat	8.00	Direct	APX w/SL	0.06	6.40	Direct	NP-LE derated	0.08
PA-07	Basecoat #1 ASH Preheat	9.00	Direct	APX w/SL	0.06	8.00	Direct	APX w/SL	0.08
	Basecoat #2 ASH Preheat	9.00	Direct	APX w/SL	0.06	8.00	Direct	APX w/SL	0.08
	Clearcoat #1 ASH Preheat	7.00	Direct	APX w/SL	0.06	5.00	Direct	APX w/SL	0.08
	Clearcoat #2 ASH Preheat	7.00	Direct	APX w/SL	0.06	5.00	Direct	APX w/SL	0.08
	Repair ASH Preheat	13.00	Direct	APX w/SL	0.06	11.00	Direct	APX w/SL	0.08
	Basecoat #1 ASH Reheat	2.00	Direct	APX w/SL	0.06	1.20	Direct	NP-LE derated	0.08
	Basecoat #2 ASH Reheat	2.00	Direct	APX w/SL	0.06	1.20	Direct	NP-LE derated	0.08
	Clearcoat #1 ASH Reheat	2.00	Direct	APX w/SL	0.06	0.80	Direct	NP-LE derated	0.08
	Clearcoat #2 ASH Reheat	2.00	Direct	APX w/SL	0.06	0.80	Direct	NP-LE derated	0.08
	Repair ASH Reheat	3.00	Direct	APX w/SL	0.06	1.20	Direct	NP-LE derated	0.08

			Original BACT			Revised BACT			
Emission Unit ID	Description	Maximum Heat Input (MMBTU/hr)	Type	Burner Technology	Limit (lb/MMBTU)	Maximum Heat Input (MMBTU/hr)	Type	Burner Technology (or equivalent)	Limit (lb/MMBTU)
	Basecoat Flash Off #1 Heater	2.75	Indirect	MPACK w/mech	0.02	2.60	Indirect	OP-LE	0.048
	Basecoat Flash Off #2 Heater	2.75	Indirect	MPACK w/mech	0.02	2.60	Indirect	OP-LE	0.048
	Topcoat Oven Zone 1	2.75	Indirect	MPACK w/mech	0.02	3.50	Indirect	OP-LE	0.048
	Topcoat Oven Zone 2	2.75	Indirect	MPACK w/mech	0.02	2.60	Indirect	OP-LE	0.048
	Topcoat Oven Zone 3	2.75	Indirect	MPACK w/mech	0.02	1.70	Direct	MPACK w/mech	0.02
	Topcoat Oven Zone 4					1.70	Direct	MPACK w/mech	0.02
	Topcoat Oven Zone 5					1.70	Direct	MPACK w/mech	0.02
	Repair Oven	1.65	Indirect	MPACK w/mech	0.02	2.60	Direct	MPACK w/mech	0.02
PA-11 and PA-12	Not to be constructed (DELETED)								
PA-20	Hot water generator	6.12	Direct		0.04	6.12	Direct		0.04
	Hot water generator	6.12	Direct		0.04	6.12	Direct		0.04
	Hot water generator	6.12	Direct		0.04	6.12	Direct		0.04
	Hot water generator	6.12	Direct		0.04	6.12	Direct		0.04
PA-21	Working Area ASH #1	14.00	Direct	APX w/SL	0.06	20.00	Direct	APX w/SL	0.08
PA-22	Working Area ASH #2					8.00	Direct	APX w/SL	0.08
PA-23	Working Area ASH #3					5.00	Direct	APX w/SL	0.08
PA-24	HVAC #1 ASH					13.00	Direct	APX w/SL	0.08
PA-25	HVAC #2 ASH					13.00	Direct	APX w/SL	0.08
PA-26	HVAC #3 ASH					8.00	Direct	APX w/SL	0.08
No Sep ID	Regenerative Thermal Oxidizer for control of Body Paint emissions (PA-02, PA-03, PA-05, PA-07)	14.00	Direct		0.1	14.00	Direct		0.1
No Sep ID	Regenerative Thermal Oxidizer for control of Body Paint emissions (PA-02, PA-03, PA-05, PA-07)	14.00	Direct		0.1	14.00	Direct		0.1
Plastic Process Burners									
PO-02	Booth #1 ASH Preheat	2.70	Direct	APX w/SL	0.06	17.00	Direct	APX w/SL	0.08
	DELETED								
	Booth #1 ASH Reheat	0.16	Direct	APX w/SL	0.06	2.00	Direct	NP-LE derated	0.08
	Topcoat Oven Zone #1	1.81	Indirect	MPACK w/mech	0.02	2.60	Indirect	OP-LE	0.048
	Topcoat Oven Zone #2					2.60	Indirect	MPACK w/mech	0.02
PO-03	Not to be constructed (DELETED)								
PO-13	Not to be constructed (DELETED)								

Emission Unit ID	Description	Maximum Heat Input (MMBTU/hr)	Original BACT			Revised BACT			
			Type	Burner Technology	Limit (lb/MMBTU)	Maximum Heat Input (MMBTU/hr)	Type	Burner Technology (or equivalent)	Limit (lb/MMBTU)
No Sep ID	Regenerative Thermal Oxidizer for control of Bumper Painting Emissions (PO-02)	14.00	Direct		0.1	14.00	Direct		0.1

Paint/Plastics NOx BACT Economic Analysis

Emission Unit ID	Description	Maximum Heat Input (MMBTU/hr)	Type	Maxon "Standard Choice" Burner	Maxon "Standard Choice" Burners (lb/hour)
Paint					
PA-05	Surfacer Flash Off #1 Heater	3.500	Indirect	Ovenpak	0.4235
PA-05	Surfacer Flash Off #2 Heater	2.600	Indirect	Ovenpak	0.3146
PA-07	Base Flash Off #1 Heater	2.600	Indirect	Ovenpak	0.3146
PA-07	Base Flash Off #2 Heater	2.600	Indirect	Ovenpak	0.3146
PA-05	Surfacer #1 Oven Zone 1	2.600	Indirect	Ovenpak	0.3146
PA-05	Surfacer #1 Oven Zone 2	2.600	Indirect	Ovenpak	0.3146
PA-07	Top Coat Oven Zone 1	3.500	Indirect	Ovenpak	0.4235
PA-07	Top Coat Oven Zone 2	2.600	Indirect	Ovenpak	0.3146
Plastics					
PO-02	Top Coat Oven Zone 1	2.600	Indirect	Ovenpak	0.3146

Baseline	0.1	lb/MMBTU
Maxon Std. Choice		
APX	0.09	lb/MMBTU
Ovenpaks	0.121	lb/MMBTU
NP-LE	0.073	lb/MMBTU
Maxon Lower NOx		
APX w/SL MRV	0.08	lb/MMBTU
Ovenpak LE	0.048	lb/MMBTU
MPAKT w/SL MRV	0.014	lb/MMBTU
MPAKT w/mech	0.02	lb/MMBTU
NP-LE Derated <600 MMbtu/ft	0.08	lb/MMBTU

Capital Recovery Factor
8%; 10 years 0.14903

Natural gas pricing $13.54 per mcf

Paint/Plastics NOx BACT Economic Analysis

Emission Unit ID	Description	Maximum Heat Input (MMBTU/hr)	Type	Maxon "Better NOx" Burner	Maximum Heat Input (MMBTU/hr)	Maxon "Better NOx" Burners (lb/hour)	Maxon "Better NOx" Burner (ton/yr)	Maxon "Best NOx" Burner (mech. control)
Paint								
PA-05	Surfacer Flash Off #1 Heater	3.500	Indirect	Ovenpak LE	3.5	0.1680	0.3679	MPAKT w/mech
PA-05	Surfacer Flash Off #2 Heater	2.600	Indirect	Ovenpak LE	2.6	0.1248	0.2733	MPAKT w/mech
PA-07	Base Flash Off #1 Heater	2.600	Indirect	Ovenpak LE	2.6	0.1248	0.2733	MPAKT w/mech
PA-07	Base Flash Off #2 Heater	2.600	Indirect	Ovenpak LE	2.6	0.1248	0.2733	MPAKT w/mech
PA-05	Surfacer #1 Oven Zone 1	2.600	Indirect	Ovenpak LE	2.6	0.1248	0.2733	MPAKT w/mech
PA-05	Surfacer #1 Oven Zone 2	2.600	Indirect	Ovenpak LE	2.6	0.1248	0.2733	MPAKT w/mech
PA-07	Top Coat Oven Zone 1	3.500	Indirect	Ovenpak LE	3.5	0.1680	0.3679	MPAKT w/mech
PA-07	Top Coat Oven Zone 2	2.600	Indirect	Ovenpak LE	2.6	0.1248	0.2733	MPAKT w/mech
Plastics								
PO-02	Top Coat Oven Zone 1	2.600	Indirect	Ovenpak LE	2.6	0.1248	0.2733	MPAKT w/mech

Baseline	0.1	lb/MMBTU
Maxon Std. Choice		
APX	0.09	lb/MMBTU
Ovenpaks	0.121	lb/MMBTU
NP-LE	0.073	lb/MMBTU
Maxon Lower NOx		
APX w/SL MRV	0.08	lb/MMBTU
Ovenpak LE	0.048	lb/MMBTU
MPAKT w/SL MRV	0.014	lb/MMBTU
MPAKT w/mech	0.02	lb/MMBTU
NP-LE Derated <600 MMbtu/ft	0.08	lb/MMBTU

Capital Recovery Factor

8%; 10 years 0.14903

Natural gas pricing $13.54 per mcf

Paint/Plastics NOx BACT Economic Analysis

Emission Unit ID	Description	Maximum Heat Input (MMBTU/hr)	Type	Maxon "Best NOx" Burner (digital control)	Maximum Heat Input (MMBTU/hr)	Maxon "Best NOx" Burners (digital conrol) (lb/hour)	Maxon "Standard Choice" Burner (ton/yr)	Additional natural gas usage (MMBTU/hr)	Maxon "Best NOx" Burner (digital) (ton/yr)
Paint									
PA-05	Surfacer Flash Off #1 Heater	3.500	Indirect	MPAKT w/SL MRV	3.5	0.0490	0.93	0.3971	0.11
PA-05	Surfacer Flash Off #2 Heater	2.600	Indirect	MPAKT w/SL MRV	2.6	0.0364	0.69	0.1830	0.08
PA-07	Base Flash Off #1 Heater	2.600	Indirect	MPAKT w/SL MRV	2.6	0.0364	0.69	0.3696	0.08
PA-07	Base Flash Off #2 Heater	2.600	Indirect	MPAKT w/SL MRV	2.6	0.0364	0.69	0.3696	0.08
PA-05	Surfacer #1 Oven Zone 1	2.600	Indirect	MPAKT w/SL MRV	2.6	0.0364	0.69	0.3123	0.08
PA-05	Surfacer #1 Oven Zone 2	2.600	Indirect	MPAKT w/SL MRV	2.6	0.0364	0.69	0.1414	0.08
PA-07	Top Coat Oven Zone 1	3.500	Indirect	MPAKT w/SL MRV	3.5	0.0490	0.93	0.3388	0.11
PA-07	Top Coat Oven Zone 2	2.600	Indirect	MPAKT w/SL MRV	2.6	0.0364	0.69	0.1414	0.08
Plastics									
PO-02	Top Coat Oven Zone 1	2.600	Indirect	MPAKT w/SL MRV	2.6	0.0364	0.69	0.2909	0.08

Baseline	0.1	lb/MMBTU
Maxon Std. Choice		
APX	0.09	lb/MMBTU
Ovenpaks	0.121	lb/MMBTU
NP-LE	0.073	lb/MMBTU
Maxon Lower NOx		
APX w/SL MRV	0.08	lb/MMBTU
Ovenpak LE	0.048	lb/MMBTU
MPAKT w/SL MRV	0.014	lb/MMBTU
MPAKT w/mech	0.02	lb/MMBTU
NP-LE Derated <600 MMbtu/ft	0.08	lb/MMBTU

Capital Recovery Factor
8%; 10 years 0.14903

Natural gas pricing $13.54 per mcf

Paint/Plastics NOx BACT Economic Analysis

Emission Unit ID	Description	Maximum Heat Input (MMBTU/hr)	Type	Maxon "Best NOx" Burner (mech) Add-On Cost	Maxon "Best NOx" Burner (mech) Annualized Cost	Maxon "Best NOx" Burner (digital) Add-On Cost	Maxon "Best NOx" Burner (digital) Annualized Cost	Cost Effectiveness of Maxon "Best" burner (mech) ($/ton NOx Reduced)	Cost Effectiveness of Maxon "Best" burner (digital) ($/ton NOx Reduced)
Paint									
PA-05	Surfacer Flash Off #1 Heater	3.500	Indirect	$5,220	$23,630	$14,220	$24,971	$110,100	$95,817
PA-05	Surfacer Flash Off #2 Heater	2.600	Indirect	$4,750	$11,237	$13,750	$12,578	$70,480	$64,971
PA-07	Base Flash Off #1 Heater	2.600	Indirect	$4,750	$21,978	$13,750	$23,319	$137,852	$120,454
PA-07	Base Flash Off #2 Heater	2.600	Indirect	$4,750	$21,978	$13,750	$23,319	$137,852	$120,454
PA-05	Surfacer #1 Oven Zone 1	2.600	Indirect	$4,750	$18,681	$13,750	$20,022	$117,171	$103,422
PA-05	Surfacer #1 Oven Zone 2	2.600	Indirect	$4,750	$8,843	$13,750	$10,184	$55,463	$52,604
PA-07	Top Coat Oven Zone 1	3.500	Indirect	$5,220	$20,276	$14,220	$21,617	$94,473	$82,948
PA-07	Top Coat Oven Zone 2	2.600	Indirect	$4,750	$8,843	$13,750	$10,184	$55,463	$52,604
Plastics									
PO-02	Top Coat Oven Zone 1	2.600	Indirect	$4,750	$17,448	$13,750	$18,789	$109,438	$97,054

Baseline	0.1	lb/MMBTU
Maxon Std. Choice		
APX	0.09	lb/MMBTU
Ovenpaks	0.121	lb/MMBTU
NP-LE	0.073	lb/MMBTU
Maxon Lower NOx		
APX w/SL MRV	0.08	lb/MMBTU
Ovenpak LE	0.048	lb/MMBTU
MPAKT w/SL MRV	0.014	lb/MMBTU
MPAKT w/mech	0.02	lb/MMBTU
NP-LE Derated <600 MMbtu/ft	0.08	lb/MMBTU

Capital Recovery Factor
8%; 10 years 0.14903

Natural gas pricing $13.54 per mcf

Appendix C

Air Quality Analysis

Honda Motors – Assembly Division

Greensburg, Indiana (Decatur County)

Tracking and Plant ID: 031-23360-00026

Proposed Project

Honda Manufacturing of Indiana LLC (HMI) had submitted an initial PSD application on July 17, 2006, to build an auto assembly plant in Greensburg, Indiana. Since that time, a revised application has been submitted. The preliminary specifications for the site include: one assembly line, manufacturing capacity of approximately 250,000 units per year, a metal and plastics parts production and a painting area. The estimated start date is August 2008.

Trinity Consultants prepared the modeling portion of the permit application for HMI. The Technical Support and Modeling Section in the Office of Air Quality (QAQ) received the Significance, NAAQS and Increment modeling on August 2, 2006, the HAPs modeling on August 11, 2006, and the written TSD on August 14, 2006. A revision to this modeling submittal was received on May 30, 2007. This technical support document provides the air quality analysis review of the submitted modeling by Trinity Consultants for HMI.

Analysis Summary

Based on the potential emissions after controls, a PSD air quality analysis was triggered for VOCs, PM_{10}, and NOx. For VOCs, an ozone analysis was performed in the initial analysis and showed no impact that would cause concern. For this revision, the emission rates for NOx and PM_{10} have changed, a few sources have been relocated, some buildings have been modified, the property line has changed and the road configuration inside the plant property was modified. The significant impact analysis for NOx and PM_{10} determined that modeling concentrations exceeded the significant impact levels. A refined analysis was required and showed no violation of the NAAQS and the PSD increment. Pre-construction and post construction monitoring requirements are not necessary since nearby monitoring data was available from Indianapolis. An additional impact analysis was conducted and showed no significant impact. A Hazardous Air Pollutant (HAP) analysis was performed since their aggregate HAP emissions were greater than 25 tons per year. Based on the modeling results, the source will not have a significant impact upon federal air quality standards.

Air Quality Impact Objectives

The purpose of the air quality impact analysis in the permit application is to accomplish the following objectives. Each objective is individually addressed in this document in each section outlined below.

A. Establish which pollutants require an air quality analysis based on PSD significant emission rates.

B. Provide analyses of actual stack heights with respect to Good Engineering Practice (GEP), the meteorological data used, a description of the model used in the analysis, and the receptor grid utilized for the analyses.

C. Determine the significant impact level, the area impacted by the source's emissions and background air quality levels.

D. Demonstrate that the source will not cause or contribute to a violation of the National Ambient Air Quality Standard (NAAQS) or PSD increment if the applicant exceeds significant impact levels.

E. Perform an ozone assessment if needed based on VOC and NOx emissions.

F. Perform a qualitative analysis of the source's impact on general growth, soils, vegetation and visibility in the impact area with emphasis on any Class I areas. The nearest Class I area is Kentucky's Mammoth Cave National Park.

G. Perform a Hazardous Air Pollutant (HAP) screening for informational purposes.

H. Summarize the Air Quality Analysis.

Section A - Pollutants Analyzed for Air Quality Impact

Applicability

The PSD requirements, 326 IAC 2-2, apply in attainment and unclassifiable areas and require an air quality impact analysis of each regulated pollutant emitted in significant amounts by a major stationary source or modification. Significant emission levels for each pollutant are defined in 326 IAC 2-2-1 and in the Code of Federal Regulations (CFR) 52.21(b) (23) (i).

Proposed Project Emissions

VOCs, PM_{10}, NOx, SO_2, and CO are the pollutants that will be emitted from HMI and are summarized below in Table 1. VOCs make HMI a major PSD source since they are over 250 tons per year. PM_{10} and NOx potential emissions after controls exceed the PSD significant emission rates and will require an air quality analysis. An ozone analysis was performed for VOCs and NOx in the initial analysis but is not a PSD requirement.

TABLE 1
Significant Emission Rates for PSD

POLLUTANT	SOURCE EMISSION RATE (Facility totals in tons/year)	SIGNIFICANT EMISSION RATE (tons/year)	PRELIMINARY AQ ANALYSIS REQUIRED
VOC	460	250	No
PM_{10}	18.1	15	Yes
NOx	55.8	40	Yes
SO2	.41	40	No
CO	97	100	No

These are HMI's permitted emission rates that are taken from OAQ's emissions calculation sheets.

Section B – Good Engineering Practice (GEP), Met Data, Model Used, Receptor Grid and Terrain

Stack Height Compliance with Good Engineering Practice (GEP)

Applicability

Stacks should comply with GEP requirements established in 326 IAC 1-7-4. If stacks are lower than GEP, excessive ambient concentrations due to aerodynamic downwash may occur. Dispersion modeling credit for stacks taller than 65 meters (213 feet) are limited to GEP for the purpose of establishing emission limitations. The GEP stack height takes into account the distance and dimensions of nearby structures, which would affect the downwind wake of the stack. The downwind wake is considered to extend five times the lesser of the structure's height or width. A GEP stack height is determined for each nearby structure by the following formula:

$$Hg = H + 1.5L$$

Where: Hg is the GEP stack height
H is the structure height
L is the structure's lesser dimension (height or width)

New Stacks

Since the new stack heights for HMI are below GEP stack height, the effect of aerodynamic downwash will be accounted for in the air quality analysis for the project.

Meteorological Data

The meteorological data used in AERMOD consisted of 1986 through 1990 surface data from the Indianapolis, International Airport (Station Number 93819), and upper air measurements taken at Dayton Wright Patterson AFB (Station Number 13840). The meteorological data was downloaded from Lakes Environmental and preprocessed using AERMET.

Model Description

Trinity Consultants used AERMOD, Version 04300. OAQ used the same model version to determine maximum off-property concentrations or impacts for each pollutant. All regulatory default options were utilized in the U.S. EPA approved model, as listed in the 40 Code of Federal Regulations Part 51, Appendix W "Guideline on Air Quality Models".

Receptor Grid

OAQ modeling used the same receptor grids generated by Trinity Consultants. Depending on the receptor grid used the number of receptors varied between 2883 to 5640 receptors. The property line receptors were spaced 100 meters apart along the boundary of the property. The four sets of receptor grids that were included in the modeling analysis are explained below:

1. Four "property line" grids consisting of evenly-spaced receptors 100 meters apart placed along the respective facility boundary,
2. A "fine" grid containing 100-meter spaced receptors extending approximately 3.0 km from the center of the facility,
3. A "medium" grid containing 500-meter spaced receptors extending 8.0 km from the center of

the facility, exclusive of receptors on the fine grid, and

4. A “course grid” containing 1,000-meter spaced receptors extending 20.0 km from the center of the facility, exclusive of receptors on the fine and medium grids.

Treatment of Terrain

The terrain surrounding HMI consists of only simple terrain. Receptor terrain elevations inputted into the model were interpolated from DEM data obtained from the USGS. DEM terrain data was preprocessed using AERMAP. The terrain files that were used in the terrain analysis can be found on page 5-5 in Trinity’s air quality technical support document.

Section C - Significant Impact Level/Area (SIA) and Background Air Quality Levels

A significant impact analysis was conducted to determine if the source would exceed the PSD significant impact levels (concentrations). If the source's concentrations would exceed these levels, further air quality analysis is required. Modeling for PM_{10} and NOx was required because the results did exceed significant impact levels. Significant impact levels are defined by the following time periods in Table 2 below with all maximum-modeled concentrations from the worst case operating scenarios.

TABLE 2
Significant Impact Analysis

POLLUTANT	TIME AVERAGING PERIOD	MAXIMUM MODELED IMPACTS (ug/m^3)	SIGNIFICANT IMPACT LEVEL (ug/m^3)	REFINED AQ ANALYSIS REQUIRED
NOx	Annual*	5.7	1	Yes
PM_{10}	Annual*	2.2	1	Yes
PM_{10}	24 hour*	18.1	5	Yes

*First highest values per EPA NSR manual October 1990.

Pre-construction Monitoring Analysis

Applicability

The PSD rule, 326 IAC 2-2-4, requires an air quality analysis of the new source or the major modification to determine if the pre-construction monitoring threshold is triggered. In most cases, monitoring data taken from a similar geographic location can satisfy this requirement if the pre-construction monitoring threshold has been exceeded. Also, post construction monitoring could be required if the air quality in that area could be adversely impacted by applicant’s emissions.

Modeling Results

A comparison of the modeling results was made to the PSD preconstruction monitoring thresholds. The results are shown in the table below.

TABLE 3
Preconstruction Monitoring Analysis

POLLUTANT	TIME AVERAGING PERIOD	MAXIMUM MODELED IMPACTS (ug/m^3)	DEMINIMIS LEVEL (ug/m3)	ABOVE DE MINIMIS LEVEL

NOx	Annual*	5.7	14	No
PM_{10}	24 hour*	18.1	10	Yes

***First highest values per EPA NSR manual October 1990.

PM_{10} did trigger the preconstruction monitoring. Honda can satisfy the preconstruction monitoring requirement since there is air quality monitoring data representative of the area in Indianapolis.

Background Concentrations

Applicability
EPA's "Ambient Monitoring Guidelines for Prevention of Significant Deterioration" (EPA-450/4-87-007) Section 2.4.1 is cited for approval of the monitoring sites for this area.

Background Monitors
Background data was taken from the closest monitoring stations to HMI. The closest NOx station is located at the Naval Avionics Center on East 21st Street on the southeast side of Indianapolis. The closest PM_{10} monitoring station is located at the Seal Products Building on East English Avenue, also on the southeast side of Indianapolis. Using background data from monitors located in an industrialized part of Indianapolis represents a conservative approach since actual background values from rural Decatur County would likely be lower. It was agreed between Honda and IDEM that this approach be taken in place of the preconstruction monitoring requirement.

For all 24-hour background concentrations, the averaged second highest monitoring values were used. Annual background concentrations were taken from the maximum annual values.

TABLE 4
Existing Monitoring Data Used For Background Concentrations *

Pollutant	Monitoring Site	Averaging Period	Concentration (ug/m3)
NOx	18-097-0073	Annual	30.3
PM_{10}	18-097-0066	Annual	24.7
PM_{10}	18-097-0066	24 hour	48.7

*OAQ used the most conservative values for the air quality analysis. It is standard policy to use the latest 3 years of data.

Section D - NAAQS and PSD Increment

NAAQS Compliance Analysis and Results

OAQ supplied emission inventories of all point sources within a 50-kilometer radius of Honda. The NAAQS inventories are generated from I-STEPS (State Emission Processing System) in accordance with 326 IAC 2-6. The PSD increment inventories include sources that affect the increment and are compiled from permits issued by IDEM.

NAAQS modeling for the appropriate time-averaging periods for NOx and PM_{10} was conducted and compared to the respective NAAQs limit. OAQ modeling results are shown in Table 5. All maximum-modeled concentrations were compared to the respective NAAQS limit. All maximum-modeled concentrations during the five years were below the NAAQS limits and further modeling was not required.

TABLE 5
NAAQS Analysis

Pollutant	Year	Time-Averaging Period	Maximum Concentration ug/m3	Background Concentration ug/m3	Total ug/m3	NAAQS Limit ug/m3	NAAQS Violation
NOx	1986	Annual[1]	5.9	30.3	36.2	100	NO
PM_{10}	1986	Annual[1]	2.3	24.7	27	50	NO
PM_{10}	1988	24 hour H6H[2]	14.8	48.7	63.5	150	NO

[1] First highest values per EPA NSR manual October 1990. Any small discrepancies between the NAAQS and increment numbers are due to slightly different source inventories used for the NAAQS and the increment.
[2] High 6th high value per EPA NSR manual October 1990.

Analysis and Results of Source Impact on the PSD Increment

Applicability

Maximum allowable increases (PSD increments) are established by 326 IAC 2-2 for NOx and PM_{10}. This rule also limits a source to no more than 80 percent of the available PSD increment to allow for future growth.

Source Impact

Since the impact for NOx and PM_{10} from Honda modeled above significant impact levels, a PSD increment analysis for the existing major sources and its surrounding counties was required. Results of the increment modeling are summarized in Table 6 below.

TABLE 6
Increment Analysis

Pollutant	Year	Time-Averaging Period	Maximum Concentration ug/m3	PSD Increment Ug/m3	Percent Impact on the PSD Increment	Increment Violation
NOx	1986	Annual[1]	5.83	25	23.3%	NO
PM_{10}	1986	Annual[1]	2.2	17	12.9%	NO
PM_{10}	1988	24 hour H2H[2]	15.7	30	52.3%	NO

[1] First highest value per EPA NSR manual October 1990. Any small discrepancies between NAAQS and increment numbers are due to slightly different source inventories used for the NAAQS and the increment.
[2] Highest second high per EPA NSR manual October 1990.

The results of the increment analysis shows all pollutants for all averaging periods were below 80% of the available increment. No further analysis is required.

Part E – Ozone Assessment

Photochemical Modeling for Ozone Assessment

In the initial analysis, OAQ conducted an ozone assessment to determine whether ozone precursor (NOx and VOC) emissions from the proposed Honda facility would significantly impact ozone monitors in surrounding 8-hour ozone nonattainment areas in Indiana, Ohio and Kentucky. OAQ is a member of the Midwest Regional Planning Organization (MRPO), which uses photochemical modeling to determine future ozone reduction strategies for attainment demonstrations for State Implementation Plans (SIPs) for Indiana, Illinois, Michigan, Wisconsin and Ohio. The MRPO supplied both 2002 base year and 2009 future year emissions with economic growth and anticipated emission reductions to be in effect by 2009, meteorological and chemistry files as well as photochemical model source codes used in this analysis. Indiana followed the U.S. EPA guidance in all modeling and attainment demonstration methods for this analysis.

Ozone Assessment Results

The Comprehensive Air Quality Model with extensions (CAMx) was the photochemical model used; this model is accepted by the U.S. EPA. Honda's potential NOx and VOC emissions were incorporated into the Decatur County emissions profile for low-level sources. <u>The modeled emissions were taken from Honda's application, with preliminary VOC emissions at 672 tons per year (t/yr) and NOx emissions at 41 tons per year. Honda has been permitted to emit 460 t/yr of VOC.</u> Three separate modeling runs were conducted, one model run to determine base year (2002) concentrations, one future year (2009) model run included Honda's emissions and one future year (2009) model run without Honda's emissions. The year that current 8-hour ozone nonattainment areas in Indiana must attain the National Ambient Air Quality Standard for 8-hour ozone of 0.08 parts per million (ppm) is 2009. Therefore, the 2009 ozone concentrations were modeled and comparisons of the impacts with and without Honda were made for surrounding ozone monitors.

The results were analyzed for the maximum impacts on high ozone days and also used in attainment test demonstrations to show Honda's impacts on surrounding ozone monitors. **The maximum 8-hour ozone impacts attributed to NOx and VOC emissions from Honda were in the range of 0.00004 to 0.00015 ppm.** The locations of the maximum impacts were close to the facility as the majority of emissions from Honda are VOCs, and once emitted, VOCs react fairly quickly to form ozone.

The attainment test demonstration compared 2009 future year design values with and without Honda's NOx and VOC emissions. There are 5 ozone monitors in surrounding nonattainment counties in Indiana, 14 ozone monitors in surrounding nonattainment counties in Ohio, and 5 ozone monitors in surrounding nonattainment counties in Kentucky that could potentially be impacted by NOx and VOC emissions from Honda. These nonattainment areas are located near the Honda facility and would be the most likely impacted. The results of the 8-hour ozone attainment test compared the 2009 design values with Honda's emissions at all the monitors to the 2009 design values without Honda's emissions. Based on the comparison of two separate modeled results, with and without Honda emissions in Decatur County, the only increase in the 8-hour ozone at the ozone monitors was a 0.0001 ppm increase at the Fairland, Shelby County, Indiana. Table 7 shows the attainment test results from the two modeling runs, showing the future design values at the monitors in nearby nonattainment counties. Modeled results are available for all ozone monitors in the Midwest but Table 7 represents those near the Honda facility.

Table 7
8-hour Ozone Assessment for Honda

Monitor ID	ST	County	00_02	01_03	02_04	AVGDV	RRF	Honda FYDV	2009 FYDV	Honda/2009 Difference
			ppm	ppm	ppm	ppm		ppm	ppm	ppm
1801900031	IN	Clark	.090	.092	.088	.090	0.921	.0829	.0829	0.0000
1804310041	IN	Floyd	.083	.086	.084	.0843	0.921	.0777	.0777	0.0000
1807100011	IN	Jackson	.085	.085	.080	.0833	0.875	.0729	.0729	0.0000
1808100021	IN	Johnson	.087	.086	.083	.0853	0.89	.076	.076	0.0000
1814500011	IN	Shelby	.093	.094	.087	.0913	0.91	.0832	.0831	0.0001
2102900061	KY	Bullitt	.085	.081	.076	.0807	0.93	.075	.075	0.0000
2111100271	KY	Jefferson	.085	.079	.075	.0797	0.93	.0741	.0741	0.0000

2111100511	KY	Jefferson	.084	.084	.080	.0827	0.926	.0766	.0766	0.0000
2111110211	KY	Jefferson	.083	.079	.076	.0793	0.928	.0736	.0736	0.0000
2118500041	KY	Oldham	.087	.086	.083	.0853	0.913	.0779	.0779	0.0000
3901700041	OH	Butler	.088	.092	.089	.0897	0.921	.0826	.0826	0.0000
3901710043	OH	Butler	.089	.089	.085	.0877	0.912	.080	.080	0.0000
3902300011	OH	Clark	.090	.088	.087	.0883	0.888	.0784	.0784	0.0000
3902300031	OH	Clark	.087	.086	.083	.0853	0.9	.0768	.0768	0.0000
3902500221	OH	Clermont	.000	.090	.088	.089	0.92	.0819	.0819	0.0000
3902710021	OH	Clinton	.096	.096	.091	.0943	0.889	.0839	.0839	0.0000
3905700061	OH	Greene	.086	.090	.087	.0877	0.894	.0784	.0784	0.0000
3906100061	OH	Hamilton	.089	.093	.089	.0903	0.939	.0848	.0848	0.0000
3906100101	OH	Hamilton	.084	.087	.086	.0857	0.918	.0787	.0787	0.0000
3906100401	OH	Hamilton	.087	.087	.084	.086	0.938	.0807	.0807	0.0000
3910900051	OH	Miami	.087	.088	.086	.087	0.884	.0769	.0769	0.0000
3911300191	OH	Montgomery	.086	.087	.000	.0865	0.898	.0777	.0777	0.0000
3913510011	OH	Preble	.082	.081	.077	.080	0.88	.0704	.0704	0.0000
3916500061	OH	Warren	.089	.085	.000	.087	0.91	.0792	.0792	0.0000

00_02 - design value from (2000-2002),
01_03 - design value from (2001-2003),
02_04 - design value from (2002-2004),
AVGDV - average of the 3 design values,
RRF - relative reduction factor – ratio of future year and base year modeling,
Honda FYDV - future year design value with Honda emissions,
2009 FYDV - future year design value without Honda emissions, and
Honda/2009 Difference - the part per million differences between the future year design values.

For further information on the attainment test, calculating relative reduction factors and other additional 8-hour ozone documentation, please refer to "Guidance on the Use of Models and Other Analyses in Attainment Demonstrations for the 8-hour Ozone NAAQS**"** at the U.S. EPA website http://www.epa.gov/scram001/guidance_sip.htm

Conclusion

OAQ has conducted an ozone assessment to determine if there will be ozone impacts from Honda's VOC and NOx emissions on surrounding ozone monitors. Photochemical modeling was conducted for the summer of 2002. The Comprehensive Air Quality Model with extensions (CAMx) is the U.S. EPA accepted photochemical model used in conjunction with emissions and chemistry files obtained from the MRPO. Results were used in the U.S. EPA attainment test for 8-hour ozone to determine if additional VOC and NOx emissions from Honda would impact any of the surrounding 8-hour ozone monitors. Maximum 8-hour ozone impacts were found close to the Honda facility and were below 0.0002 parts per million (ppm). Based on the attainment test, there was no difference at any of the surrounding ozone monitors between the future year design values with Honda emissions and the future year design values without Honda emissions with the exception of a 0.0001 ppm increase at the Fairland, Shelby County, Indiana monitor. This increase will not impact the future attainment status of the Fairland monitor or any other ozone monitors.

Part F – Qualitative Analysis

Additional Impact Analysis

All PSD permit applicants must prepare additional impacts analysis for each pollutant subject to regulation under the Act. This analysis assesses the impacts on growth, soils and vegetation, endangered species and visibility caused by any increase in emissions of any regulated pollutant from the source. The HMI modeling submittal provided an additional impact analysis performed by Trinity Consultants.

Economic Growth

The purpose of the growth analysis is to quantify project associated growth and estimate the air quality impacts from this growth either quantitatively or qualitatively.

It is estimated that approximately 2,000 additional jobs will be created as a result of the proposed project. Some of the employees will be drawn from the nearby population of Greensburg; others from surrounding areas as commuters. Along with the new workforce, there will be an anticipated increase in ancillary growth as a result from the proposed project. Since the area is predominately rural, it is not expected the growth impacts will cause a violation of the NAAQs or the PSD increment.

Soils and Vegetation Analysis

A list of soil types present in the general area was determined. Soil types include the following: Loamy Glacial Till, Moderate Thick Loess Over Loamy Glacial Till, and Thin Loess Over Loamy Glacial Till.

Due to the agricultural nature of the land, crops in the Decatur County area consist mainly of corn, wheat, and soybeans (2002 Agricultural Census for Decatur County). The maximum modeled concentrations for HMI are well below the threshold limits necessary to have adverse impacts on the surrounding vegetation such as autumn bent, nimblewill, barnyard grass, bishopscap and horsetail, and milkweed (Flora of Indiana – Charles Deam). Livestock in Decatur County consist mainly of hogs, cattle, and sheep (2002 Agricultural Census for Decatur County) and will not be adversely impacted from the facility. Trees in the area are mainly hardwoods. These are hardy trees and no significant adverse impacts are expected due to modeled concentrations.

Federal and State Endangered Species Analysis

Federal and state endangered or threatened species are listed by the U.S. Fish and Wildlife Service; Division of Endangered Species for Indiana and includes 5 amphibians, 27 birds, 10 fishes, 7 mammals, 15 mollusks, and 15 reptiles. Of the federal and state endangered species on the list, 5 mollusks, 1 fish, 2 birds, and 2 mammals have habitat within Decatur County. The mollusks, fish and 1 species of bird are found along rivers and lakes while the other species of bird and mammals are found in forested areas. The facility is not expected to have any additional adverse effects on the habitats of the species than what has already occurred from the industrial, farming, and residential activities in the area.

Federal and state endangered or threatened plants are listed by the U.S. Fish and Wildlife Service, Division of Endangered Species for Indiana. They list 6 state endangered or threatened species of plants. At this time no federally endangered plant species are found in Decatur County. The endangered plants do not thrive in industrialized and residential areas. The facility is not expected to adversely affect any plant on the endangered species list.

Visibility Analysis

The VISCREEN model is designed as a screening model to determine the visual impact parameters from a single source plume. It is used basically to determine whether or not a plume is visible as an object itself. The visibility impairment analysis considers the impacts that occur within the impact area of the source as defined by the user distances. The user distances are determined by the nearest interstate or airport. EPA has defined these locations in guidance to the state.

The PM_{10} and NOx emissions limits were used to run a local visibility Level 1 and a Level 2 analysis. VISCREEN Version 1.01 was used to determine if the color difference parameter (Delta-E) or the plume (green) contrast limits were exceeded. The Delta-E was developed to specify the perceived magnitude of color and brightness changes and is used as the primary basis for determining the perceptibility of plume visual impacts. The plume constant can be defined at any wavelength as the relative difference in the intensity (called spectral radiance) between the viewed object and its background. This is used to determine how the human eye responds differently to different wavelengths of light. The Delta-E of 2.0 and the plume contrast of 0.05 were not exceeded at the nearest interstate location along I-74 or at the Greensburg-Decatur County Airport.

Potential visibility impacts to Mammoth Cave National Park (approximately 247 km from HMI) would be insignificant. This is due to the distance from the Class 1 area and magnitude and characteristics of emission sources at HMI.

Additional Analysis Conclusions

Finally, the results of the additional impact analysis conclude the operation of the facility will have no significant impact on economic growth, soils, vegetation or visibility in the immediate vicinity or on any Class I area.

Part G – HAPs Analysis

OAQ currently requests data concerning the emission of 189 HAPs listed in the 1990 Clean Air Act Amendments (CAAA) that are either carcinogenic or otherwise considered toxic and may be used by industries in the State of Indiana. These substances are listed as air toxic compounds on the State of Indiana, Department of Environmental Management, Office of Air Quality's construction permit application Form GSD-08.

Potential emissions of aggregate HAPs are estimated to be greater than 25 tons per year.

For HMI, a full HAP analysis was completed comparing the maximum estimated concentrations of each pollutant with the Unit Risk Factor (URF) or Inhalation Unit Risk and the Reference Concentration (RfC). This analysis offers a refined, up to date site specific analysis that takes into account the different potencies and health effects that each pollutant presents to the public.

The Unit Risk Factor (URF) is the upper-bound excess lifetime cancer risk estimated to result from continuous inhalation exposure to a pollutant over a 70 year lifetime. Multiplying the estimated concentration by the URF will produce a cancer risk estimate. The cancer risk estimate is the conservative probability of developing cancer from exposure to a pollutant or a mixture of pollutants over a 70 year lifetime, usually expressed as the number of additional cancer cases in a given number of people, e.g., one in a million. For screening purposes at HMI, the cancer estimates for each pollutant are considered to be additive when deriving the cumulative maximum individual cancer risk.

Non-cancer health effects are determined using the Reference Concentration (RfC). The RfC is an estimate of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. Dividing the estimated pollutant concentration by the RfC will determine the pollutant’s Hazard Quotient (HQ). All of the HAPs’ Hazard Quotients were added together to determine HMI’s Hazard Index (HI).

This HAP screening analysis uses health protective assumptions that overestimate the actual risk associated with emissions from HMI. Estimates 1) assume a 70 year exposure time, 2) assume that all carcinogens cause the same type of cancer, 3) assume that all non-carcinogens have additive health effects, 4) assume maximum permit allowable emissions from the facility, and 5) use conservatively derived dose-response information. The risk analysis cannot accurately predict whether there will be observed health problems around HMI; rather it identifies possible avenues of risk.

The results of the HAP modeling are in Table 8.

TABLE 8
Hazardous Air Pollutant Modeling Results

CAS Number	Pollutant	Emission Rate lb/hr	Emisson Rate (tpy)	Estimated Concentration (ug/m3)	Cancer URF (ug/m3)-1	Cancer Risk Estimate	Non-Cancer RfC, ug/m3	Hazard Quotient
106990	1,3-Butadiene	2.18E-04	9.5E-04	1.77E-04	3.0E-05	5.31E-09	2.00	0.000
91576	2-Methylnaphthalene	2.70E-06	1.2E-05	2.61E-07			70.00	0.000
56495	3-Methylcholanthrene	2.02E-07	8.8E-07	1.96E-08	6.3E-03	1.23E-10		
57976	7,12-Dimethylbenz[a]anthracene	1.80E-06	7.9E-06	1.74E-07	7.1E-02	1.24E-08		
83329	Acenaphthene	2.02E-07	8.8E-07	1.96E-08			210.00	0.000
208968	Acenaphthylene	0	0	1.96E-08			35.00	0.000
75070	Acetaldehyde	4.24E-03	1.9E-02	3.45E-03	2.2E-06	7.59E-09	9.00	0.000
107028	Acrolein	5.40E-04	2.4E-03	4.39E-04			0.02	0.022
120127	Anthracene	2.76E-07	1.2E-06	2.70E-08			1050.00	0.000
0	Arsenic compounds	2.25E-05	9.9E-05	2.18E-06	4.3E-03	9.37E-09	0.03	0.000
71432	Benzene	0.03	1.3E-01	1.00E-02	7.8E-06	7.80E-08	30.00	0.000
56553	Benzo[a]anthracene	2.02E-07	8.8E-07	1.96E-08	1.1E-04	2.16E-12		
50328	Benzo[a]pyrene	1.35E-07	5.9E-07	1.30E-08	1.1E-03	1.43E-11		
205992	Benzo[b]fluoranthene	2.02E-07	8.8E-07	1.96E-08	1.1E-04	2.16E-12		
191242	Benzo[g,h,i]perylene	1.35E-07	5.9E-07	1.30E-08	8.9E-03	1.16E-10		
207089	Benzo[k]fluoranthene	2.02E-07	8.8E-07	1.96E-08	1.1E-04	2.16E-12		
0	Beryllium compounds	1.35E-06	5.9E-06	1.30E-07	2.4E-03	3.12E-10	0.02	0.000
7440439	Cadmium compounds	1.24E-04	5.4E-04	1.20E-05	1.8E-03	2.16E-08	0.02	0.001
67663	Chloroform	0.33	1.4E+00	2.00E-02	2.3E-05	4.60E-07	0.30	0.067
218019	Chrysene	2.02E-07	8.8E-07	1.96E-08	8.9E-04	1.74E-11		
0	Cobalt	1.09E-05	4.8E-05	1.80E-06			0.10	0.000
98828	Cumene	0.42	1.8E+00	3.00E-02			400.00	0.000
53703	Dibenz[a,h]anthracene	1.35E-07	5.9E-07	1.30E-08	1.2E-03	1.56E-11		
106467	1,4-Dichlorobenzene	1.35E-04	5.9E-04	1.30E-05	6.9E-06	8.92E-11	800.00	0.000
111422	Diethanolamine	1.13E-03	4.9E-03	2.03E-04			3.00	0.000
112345	Diethylene glycol monobutyl ether	0.78	3.4E+00	7.00E-02			20.00	0.004
117840	Di-n-octyl phthalate	0.64	2.8E+00	4.00E-02			70.00	0.001
100414	Ethylbenzene	10.30	4.5E+01	8.10E-01			1000.00	0.001
111762	Ethylene glycol monobutyl ether	17.04	7.5E+01	1.40E+00			1300.00	0.001
206440	Fluoranthene	3.37E-07	1.5E-06	3.26E-08			140.00	0.000
86737	Fluorene	3.15E-07	1.4E-06	3.04E-08			140.00	0.000
50000	Formaldehyde	2.77	1.2E+01	1.80E-01	1.3E-05	2.34E-06	9.80	0.018
0	Glycol Ethers	17.97	7.9E+01	1.47E+00			20.00	0.074
193395	Indeno[1,2,3-cd]pyrene	2.81E-02	1.2E-01	2.39E-03	1.1E-04	2.63E-07		
0	Lead compounds	4.84E-05	2.1E-04	4.77E-06			1.50	0.000
0	Manganese compounds	1.51E-03	6.6E-03	2.66E-04			0.05	0.005
0	Mercury compounds	3.11E-05	1.4E-04	2.99E-06			0.09	0.000
67561	Methanol	2.66	1.2E+01	1.80E-01			4000.00	0.000
71556	Methyl chloroform	0.00	0.0E+00	0.00E+00			1000.00	0.000
78933	Methyl ethyl ketone (MEK)	9.11	4.0E+01	7.30E-01			5000.00	0.000
108101	Methyl isobutyl ketone	2.45	1.1E+01	1.70E-01			3000.00	0.000
1634044	Methyl tert butyl ether	0.12	5.3E-01	3.00E-02	2.6E-07	7.80E-09	3000.00	0.000
101688	Methylene diphenyl diisocyanate	0.92	4.0E+00	1.30E-01			0.60	0.217
91203	Naphthalene	0.65	2.8E+00	4.00E-02	3.4E-05	1.36E-06	3.00	0.013
110543	n-Hexane	0.18	7.9E-01	2.00E-02			200.00	0.000
0	Nickel compounds	2.20E-04	9.6E-04	2.22E-05	2.4E-04	5.33E-09	0.20	0.000
85018	Phenanthrene	3.44E-05	1.5E-04	2.95E-06			10.50	0.000

0	Polycyclic Organic Matter	0.03	1.3E-01	2.40E-03	3.4E-04	8.16E-07		
75569	Propylene oxide	1.43E-02	6.3E-02	1.17E-02	3.7E-06	4.33E-08	30.00	0.000
129000	Pyrene	7.49E-07	3.3E-06	7.03E-08			105.00	0.000
0	Selenium compounds	2.40E-06	1.1E-05	2.36E-07			20.00	0.000
100425	Styrene	0.31	1.4E+00	2.00E-02			1000.00	0.000
108883	Toluene	3.82	1.7E+01	3.00E-01			400.00	0.001
1330207	Xylenes	10.20	4.5E+01	7.20E-01			100.00	0.007
	Totals	80.8	353.8		**Maximum Individual Risk**	**5.430E-06**		
							Hazard Index	**0.4323**

* Further information on how URFs and RfCs are obtained can be found at the following EPA website:
http://www.epa.gov/ttn/atw/toxsource/chronicsources.html

The Hazard Index for the project does not exceed 1. Pollutants with a Hazard Quotient (HQ) greater than 1 are considered to be at concentrations that could represent a health concern. Hazard Quotients above 1 do not represent areas where adverse health effects will be observed but indicate that the potential exists.

The additive cancer risk estimate from all HAPs is a potential 5.43 additional cancer cases in one million people, driven primarily by formaldehyde and naphthalene. The US EPA considers one in ten thousand (1.0E-04) excess cancer risks to be the upper range of acceptability with ample margin of safety. This means that if an individual breathed in this concentration of HAPs from HMI continuously for 70 years, the risk of getting cancer from this exposure would be between one in 10,000. The receptor where the maximum risk occurs is located on the northern fence line of HMI. No residents will be located at the fence line. The probability for the general public to be exposed to the excess concentration for 24 hours a day, seven days a week, 52 weeks a year for 70 years is minimal.

Part H - Summary of Air Quality Analysis

Trinity Consultants prepared the modeling portion of the PSD application. Decatur County is designated as attainment for all criteria pollutants. VOCs, PM_{10}, and NOx emission rates associated with the proposed facility exceeded the respective significant emission rates. Modeling results taken from the AERMOD model showed PM_{10} and NOx impacts were predicted to be greater than the significant impact levels. HMI did trigger preconstruction monitoring for PM_{10} but can satisfy the preconstruction monitoring requirement since there is existing air quality monitoring data representative of the area. The NAAQS and increment modeling for PM_{10} and NOx showed no violations of the standards. An ozone photochemical modeling assessment showed a minimal impact at one ozone monitor (Fairland, Shelby County) and will not influence the attainment status at any surrounding 8-hour ozone nonattainment areas. The nearest Class I area is Mammoth Cave National Park in Kentucky over 100 kilometers away from the source. An additional impact analysis was required but the operation of the proposed facility will have no significant impact. A Hazardous Air Pollutant (HAP) analysis was performed but HMI showed no adverse impact.