



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
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties/Applicant

DATE: March 14, 2007

RE: AM General LLC/ 141-22343-00031

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 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, 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.dot 03/23/06



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Mr. Ken Zmudzinski
AM General LLC
12900 McKinley Highway
Mishawaka, IN 46545

March 14, 2007

Re: 141-22343-00031
PSD/Significant Source Modification to:
Part 70 Source (T141-6023-00031)

Dear Mr. Zmudzinski:

AM General LLC, was issued Part 70 operating permit T141-6023-00031 on February 25, 1999 for a stationary HUMMER assembly plant. An application to modify the Part 70 source was received on December 5, 2005. The source modification involves the re-opening of the PSD BACT for the Primer and Topcoat systems, and therefore is subject to 326 IAC 2-7-10.5, significant source modification and Prevention of Significant Deterioration (PSD) review under 326 IAC 2-2.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

- (a) The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
- (b) 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.
- (c) Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
- (d) 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.
- (e) 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.

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

Sincerely,

Original Signed By:
Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments

APD

CC: St. Joseph County
St. Joseph County Health Department
Northern Regional Office
Air Compliance Section Inspector –Rick Reynolds
Compliance Data Section
Administrative and Development



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**PREVENTION OF SIGNIFICANT DETERIORATION/SIGNIFICANT
SOURCE MODIFICATION TO A PART 70 SOURCE
OFFICE OF AIR QUALITY**

**AM General, LLC
13200 McKinley Highway
Mishawaka, Indiana 46545**

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-2, Prevention of Significant Deterioration (PSD); and 40 CFR 124 (Procedures for Decision Making), subject to the conditions contained herein, of this permit.

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.

PSD/Significant Source Modification No.: 141-22343-00031	
Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: March 14, 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)]

The Permittee owns and operates a stationary plant for the production of HUMMERs for military and commercial use.

Responsible Official: Ricky Smith – Vice President
Source Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Mailing Address: 13200 McKinley Hwy., Mishawaka, IN 46545
SIC Code: 3711
County Location: St. Joseph
County Status: Nonattainment for 8-hour ozone
Attainment for all other criteria pollutants
Source Status: Major Source, under Emission Offset Rules
Major Source, under PSD Rules
Major Source, Part 70 Permit Program
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) Surface coating facilities in the Military HUMMER (H-1) vehicle production plant:

- (1) One (1) spraying and dipping operation, constructed in 1983, identified as 001, for the prime coating of small metal parts, with PM overspray from the spraying controlled by water wash, and exhausting at stacks S1 and S2.
- (2) One (1) spraying and dipping operation, constructed in 1983, identified as 002, for the topcoating of small metal parts, with a maximum capacity of 12.5 units per hour, with PM overspray from the spraying controlled by water wash, and exhausting at stacks S3 and S4.
- (3) One (1) spray coating operation, constructed in 1983, identified as 003, for the prime coating of 1.25 ton metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S5, S6, S7 and S8.
- (4) One (1) spray coating operation, constructed in 1983, identified as 004, for the topcoating of metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S9, S10, S11 and S12.
- (5) One (1) spray coating operation, constructed in 1983, identified as 005, for the topcoating of metal truck chassis, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S13, and S14.

- (6) One (1) spray coating operation, constructed in 1983, identified as 006, for the camouflage painting of metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S15, S16, S17 and S18.
- (7) One (1) touch-up/repair spray coating operation, constructed in 1983, identified as 007, for the repair of truck body surfaces which may have been damaged in assembly or which may have defects in the quality of surface coating, or surface coating of parts for distribution as service (replacement) parts to be assembled in the field, with PM overspray controlled by dry filters, and exhausting to stack S19.
- (8) One (1) Zinc Rich Primer Dip Booth capable of coating 4.33 units per hour, to be installed adjacent to Small Parts Prime Booth 001 of the main Hummer I plant.
- (9) One (1) surface coating spray booth, identified as Booth 001b equipped with spray cup guns with compressed air capable of coating 26 units per hour, with PM overspray controlled by dry filters. This operation will consist of repair painting of metal parts.
- (10) One (1) service parts booth, with a spray system and a dip tank, using dry filters to control the PM overspray emissions from the spray system.
- (11) Metal parts blasting room capable of blasting 2.5 tons of parts per hour, using 176,250 pounds of steel and plastic abrasives per hour, with two (2) cartridge filters used to control the PM and PM10 emissions.
- (12) One (1) diesel horizontal underground storage tank, with a capacity of 12,000 gallons.
- (13) One (1) automatic transmission fluid horizontal underground storage tank, with a capacity of 10,000 gallons.
- (14) One (1) antifreeze horizontal underground storage tank, with a capacity of 10,000 gallons.
- (15) One (1) gasoline rectangular above ground storage tank, with a capacity of 1,500 gallons.
- (16) One (1) diesel fuel rectangular above ground storage tank, with a capacity of 1,500 gallons.
- (b) Surface coating facilities in the commercial HUMMER (H-1) vehicle production plant:
 - (1) One (1) spray coating operation, constructed in 1991, identified as 008, for the prime coating and topcoating of metal commercial truck bodies, with a maximum capacity of 2 units per hour, with PM overspray controlled by dry filters, and exhausting to stacks S21, S22, S23, S24, S25, S26 and S27.
 - (2) One (1) spray coating operation, constructed in 1993, identified as 009, for accent and trim painting of metal commercial truck bodies, with a

maximum capacity of 2 units per hour, with PM overspray controlled by dry filters, and exhausting to stacks S28 and S29.

Insignificant Activity:

- (3) One (1) bumper booth, with dry filters to control the PM overspray emissions.
- (c) Two (2) 25.2 MMBtu per hour natural gas-fired boilers, constructed in 1983, identified as 010 and 011, with no controls and exhausting to stacks S30 and S31, respectively, located at the Military HUMMER (H-1) vehicle production plant.
- (d) HUMMER II vehicle production plant:
 - (1) Two (2) natural-gas-fired low NO_x boilers (Categories #1 & #2), identified as boiler #1 and boiler #2, each has a heat input capacity of 25 million British Thermal Units per hour (mmBtu/hr);
 - (2) Miscellaneous natural gas-fired low NO_x process ovens and various heaters, with a total heat input of 109 mmBtu/hr, and low NO_x Thermal Oxidizer with a total heat input of 9.7 mmBtu/hr;
 - (3) Body Shop - This is where the first major step of the assembly process will be performed, metal body components of the HUMMER II vehicle (i.e. door, deck lid, hood, roof, and side panels and frame) will be supplied by off-site contractors. Various types of welding, resistance spot welding, metal grinding/brazing will be performed;
 - (4) Painting Operations:
 - (A) Electrodeposition dip prime process (E-Coat/ELPO) (Category #3)- Pre-clean wash, using a mixture of water and water reducible detergents and Phosphate application. These cleaners are applied to the vehicle surface using a combination of spray nozzles and/or dip tanks, to remove oils and grease that may have accumulated on the vehicle parts.

The prime coating system (E-Coat/ELPO), which follows the phosphate cleaning will utilized waterborne coatings made up of a mixture of resins, pigments and water. The coated vehicle will then enter the E-Coat/ELPO drying oven.

The VOC and HAPs emissions from the Electrodeposition dip prime process E-Coat/ELPO, and the E-Coat/ELPO drying oven will be controlled by a Regenerative Thermal Oxidizer.
 - (B) Primer (Category #4) - Body sealers and/or fillers, prep operation which involves scuff sanding and manual wiping using solvent and tack cloths to remove particles, then to antichip booth, then to primer booth where the exterior will be painted and primer drying oven. The coating will be manually applied or will use automatic spray systems.

The VOC and HAPs emissions from the Primer automatic zones and from the curing oven will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a water wash.

- (C) Topcoat System (Category #5) - This system will consists of a preparation area, which involves minor scuffing and manual wiping using solvent and tack cloths to remove particles and/or otherwise prepare the surface for painting, basecoat spray booth, clearcoat spray booth, flash-off area and natural gas-fired drying oven, repair/polish. The coating will be applied to the vehicle parts using various types of spray applicators.

The VOC and HAPs emissions from the basecoat/clearcoat automatic spray application zones and from the curing oven of the topcoat system will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a water wash.

- (D) Vehicle Fluid Filling (Category #7) - Where gasoline, diesel, antifreeze, transmission fluid, windshield washer fluid, power steering fluid, brake fluid, engine oil, will be filled into the vehicles.
- (E) Final and Spot Repair (Category #8) - This includes, off-line spot and three (3) final repair stations, identified as No.1, No.2, and No.3. The PM overspray from this system will be controlled by dry filters.
- (F) Assembly Final Line (Category #9) - After the paint shop, the painted vehicle components are routed to general assembly. General assembly consists of interior and exterior trim components and glass installation, chassis, wheel/tires, powertrain and final line assembly operations. The Vehicle start-up and roll test verifies if powertrain is installed correctly.
- (G) Miscellaneous Solvent Purge Usage and Cleanup (Category #10)- Solvents will be used in the body shop, paint shop, oven cleaning, general assembly areas and routine housekeeping. In the paint shop the purge material is reclaimed internally or externally to the spray application equipment.
- (H) Miscellaneous Sealers and Adhesives (Category #11) – Various sealers and adhesives will be used throughout the assembly process. Majority of these sealers and adhesives will be used in the paint shop. A special sealant will be used in the vehicle glass installation. These materials will be either air-dried or oven cured.
- (I) Bulk Storage Tanks (Category #12) - Submerged fill pipes, and conservation vents on these tanks to further minimize VOC and HAPs emissions. Stage I vapor controls will also be installed where appropriate:
- (i) One (1) purge solvent vertical fixed roof above ground storage tank, ID 101, with a capacity of 10,000 gallons.
 - (ii) One (1) unleaded gasoline vertical fixed roof above ground storage tank, ID 102, with a capacity of 10,000 gallons.
 - (iii) One (1) antifreeze (ethylene glycol) vertical fixed roof above ground storage tank, ID 103, with a capacity of

- (iv) One (1) window washer vertical fixed roof above ground storage tank, ID 104, with a capacity of 3,000 gallons.
- (v) One (1) transmission fluid vertical fixed roof above ground storage tank, ID 105, with a capacity of 3,000 gallons.
- (vi) One (1) power steering fluid vertical fixed roof above ground storage tank, ID 106, with a capacity of 3,000 gallons.
- (vii) One (1) waste solvent vertical fixed roof above ground storage tank, ID 107, with a capacity of 10,000 gallons.

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21).

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour. (two (2) 1.5 MMBtu per hour boilers)
- (b) General List of Trivial/Insignificant Activities
 - (1) Production of hot water for on-site personal use not related to any industrial or production process.
 - (2) Portable electrical generators that can be moved by hand from one location to another.
 - (3) 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) Air vents from air compressors.
 - (5) Fuel use related to food preparation for on-site consumption.
 - (6) Activities performed using hand-held equipment including the following:
 - Application of hot melt adhesives with no VOC in the adhesive formulation
 - Drilling
 - Grinding
 - Machining wood, metal or plastic
 - Polishing
 - Routing
 - Sanding
 - Turning wood, metal or plastic
 - Surface grinding
 - Sawing
 - (7) 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:
 - Activities associated with the repair and maintenance of paved and unpaved roads, including paving or sealing, or both or parking lots and roadways.
 - Painting, including interior and exterior paintings or buildings, and solvent use, excluding degreasing operations utilizing halogenated organic

- solvents.
 - Brazing, soldering, or welding operations and associated equipment.
 - Batteries and battery charging stations, except at battery manufacturing plants.
 - Lubrications, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.
- (8) Office related including the following:
- Office supplies and equipment.
 - Photocopying equipment and associated supplies.
 - Paper shredding.
 - Blueprint machines, photographic equipment, and associated supplies.
- (9) Lawn care and landscape maintenance activities and equipment, including the storage, spraying, or application of insecticides, pesticides, and herbicides.
- (10) Storage equipment and activities including:
- Pressurized storage tanks and associated piping for anhydrous ammonia, acetylene, carbon monoxide, chlorine, inorganic compounds, liquid natural gas (LNG)(Propane), liquid petroleum gas (LPG), natural gas, nitrogen dioxide and sulfur dioxide.
 - Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP.
 - Storage tanks, reservoirs, and pumping and handling equipment of any size containing soap, wax, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions provided appropriate lids and covers are utilized.
 - Storage of drums containing maintenance raw materials.
 - Storage of castings, Lance rods, or any non-HAP containing material in solid form stored in a sealed or covered container.
- (11) Emergency and standby equipment including:
- Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.
 - Vacuum producing devices for the purpose of removing potential accidental releases
- (12) Activities associated with production including the following:
- Closed, non-vented, tumblers used for cleaning or deburring metal products without abrasive blasting.
 - Electrical resistance welding.
 - Application equipment for hot melt adhesives with no VOC in the adhesive formulation.
 - Compressor or pump lubrication and seal oil systems.
 - Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
 - Equipment for washing or drying fabricated glass or metal products, if no VOCs or HAPs are used in the process, and no gas, oil, or solid fuel is burned.
- (13) Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following:
- Equipment used for surface coating, painting, dipping or spraying

- operations, except those that will emit VOCs and HAPs.
- Electric or steam heated drying ovens and autoclaves, including only the heating emissions and not any associated process emissions.
 - Application equipment for hot melt adhesives with no VOC in the adhesive formulation.
- (14) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (15) A petroleum fuel, other than gasoline dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (16) The following VOC and HAP storage containers:
- Storage tanks with capacity less than 1,000 gallons and annual throughput less than 12,000 gallons.
 - Vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids.
- (17) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (18) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (19) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (20) Cleaners and solvents characterized as follows:
- having a vapor pressure equal to or less than 2 kPa; 15 mmHg, or 0.3 psi measured at 38 degrees C (100 °F) or
 - having a vapor pressure equal to or less than 0.7 kPa; 5 mmHg; or 0.1 psi measured at 20 °C (68 °F).
 - The use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months
- (21) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (22) Closed loop heating and cooling systems.
- (23) Infrared cure equipment.
- (24) Exposure chambers for curing of ultraviolet inks and ultra-violet coatings where heat is the intended discharge.
- (25) Solvent recycling systems with bath capacity less than or equal to 100 gallons.
- (26) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (27) Water based adhesives that are less than or equal to 5% by volume of

VOCs excluding HAPs.

- (28) Non-contact cooling tower systems with either of the following:
 - Natural draft cooling towers not regulated under a NESHAP
 - Forced and induced draft cooling tower system not regulated under a NESHAP.
 - (29) Heat exchanger cleaning and repair.
 - (30) Process vessel degassing and cleaning to prepare for internal repairs.
 - (31) Paved and unpaved roads and parking lots with public access
 - (32) Purging of gas lines and vessels that is related to routine 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
 - (33) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators tank and fluid handling equipment.
 - (34) Emergency generators as follows: Gasoline generators not exceeding 110 horsepower, diesel generators not exceeding 1,600 horsepower, natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
 - (35) 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.
 - Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
 - Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (c) Plant Specific Trivial / Insignificant Activities
- (1) Sludge room water treatment (Emissions accounted for in the emission determinations at each respective source).
 - (2) Sludge room (Emissions accounted for in the emission determinations at each respective source).
 - (3) Laboratories.
 - (4) Print/Copy shops.
 - (5) Wet/dry sanding booths.
 - (6) Open metal grinding - Performed in the body shop.
 - (7) Resistance Welding - Majority of welding operations performed in the body shop.
 - (8) Property Maintenance - Landscaping, paving, roofing, and painting.
 - (9) Material Storage.

- (10) Paint Mix Rooms (Emissions accounted for in the emission determinations at each respective source).
- (11) Non-VOC parts washing.
- (12) Equipment maintenance lube/degreaser.
- (13) Vehicle washers prior to shipping.
- (14) Vehicle fluid fill operations:
 - Engine oil
 - Windshield fluid
 - Engine coolant
 - Brake fluid
 - Air conditioning refrigerant
 - Power steering fluid
- (15) Storage tanks for brake fluid, gear oil and engine oil.
- (16) Engine sub-assembly line - Assembly of engine components.
- (17) Radiator sub-assembly line - Assembly of radiator components.
- (18) Trim assembly line - Installation of various interior/exterior vehicle components.
- (19) Paint pump repair shop.
- (20) Leak test areas.
- (21) Pre-washers.
- (22) Spot sanding and painting.
- (23) Phosphate system.
- (24) Masking and polishing areas
- (25) Turbo blower - Power blowing of vehicle.
- (26) Dolly touch-up.
- (27) Dolly cleaning (water blast) - Cleaning of vehicle carrier.
- (28) Inspection and audit areas.
- (29) Emergency generators less than 1600 hp and fire pumps.

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 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted 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.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled APermit Shield.®

B.2 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, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

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

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

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

B.6 Severability [326 IAC 2-7-5(5)]

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

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

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

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue,
Indianapolis, Indiana 46204-2251

- (b) 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.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, 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, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 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 certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue

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 identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;
 - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
 - (5) Any insignificant activity that has been added without a permit revision;
 - (6) 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 Aresponsible official as defined by 326 IAC 2-7-1(34).

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

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, 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;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP 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:

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- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP-s shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ.

B.13 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, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

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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) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) 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 compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
- (1) 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.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
- (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
- (B) Continued operation of the facilities is 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.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

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- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable

requirements as of the date of permit issuance, provided that:

- (1) The applicable requirements are included and specifically identified in this permit; or
 - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) 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, including any term or condition from a previously issued construction or operation permit, 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.
- (d) 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.
- (e) 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.
- (f) 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).
- (g) 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)]
- (h) 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.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 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 Branch, Office of Air Quality
100 North Senate Avenue
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within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the responsible official as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 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 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)]
- (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.18 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251-2251

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) 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. [326 IAC 2-5-3]
 - (2) If IDEM, OAQ, upon receiving a timely and complete 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.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
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.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with 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
Indianapolis, Indiana 46204-2251

Any such application should be certified by the Responsible official[®] as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.
- (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.20 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)(D)(i) 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.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(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) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

- (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 approval required by 326 IAC 2-1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under 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
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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes 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), (c)(1), and (e)(2).

(b) 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 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 increases and decreases in emissions 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 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, 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) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
 - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ nor an authorized representative, may disclose the information unless and until IDEM, OAQ makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
 - (2) The Permittee, and IDEM, OAQ acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. 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).
- (c) IDEM, OAQ, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) 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 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour 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 Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six 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 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

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

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC IAC 14-10] [326 IAC IAC 18] [40 CFR 61.140]

- (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 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 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 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 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
Indianapolis, Indiana 46204-2251

The notifications do not require a certification by the "responsible official" as defined by 326 IAC IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory 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) **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 that the inspector be accredited is federally enforceable.

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

C.9 Performance Testing [326 IAC 3-6]

- (a) 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 methods approved by IDEM, OAQ.

A test protocol shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.10 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
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 Aresponsible official@ as defined by 326 IAC 2-7-1(34).

C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation.

In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ("2%) of full scale reading.

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

C.15 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
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the Aresponsible 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.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
 - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
 - (3) A verification to IDEM, OAQ that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAQ that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the Responsible official as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP-s shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

- (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within Anormal@ parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 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 corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (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. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the Aresponsible 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.19 Emission Statement [326 IAC 2-7-5(3)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19]

- (a) The Permittee shall submit an annual emission statement certified pursuant to 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. This annual emission statement shall meet the following requirements:

- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (2) Indicate actual emissions of other regulated pollutants from the source, for purpose of part 70 fee assessment.

- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. This emission statement must be submitted to:

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

- (c) The annual 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.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be

recorded.

- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information 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 kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ representative, 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 (or local agency) makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or local agency within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator-s standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (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
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, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) 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.

The documents submitted pursuant to this condition do not require the certification by the Responsible official as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.23 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

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

- (a) Surface coating facilities in the Military HUMMER (H-1) production plant:
- (1) One (1) spraying and dipping operation, constructed in 1983, identified as 001, for the prime coating of small metal parts, with PM overspray from the spraying controlled by water wash, and exhausting at stacks S1 and S2.
 - (2) One (1) spraying and dipping operation, constructed in 1983, identified as 002, for the topcoating of small metal parts, with a maximum capacity of 12.5 units per hour, with PM overspray from the spraying controlled by water wash, and exhausting at stacks S3 and S4.
 - (3) One (1) spray coating operation, constructed in 1983, identified as 003, for the prime coating of 1.25 ton metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S5, S6, S7 and S8.
 - (4) One (1) spray coating operation, constructed in 1983, identified as 004, for the topcoating of metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S9, S10, S11 and S12.
 - (5) One (1) spray coating operation, constructed in 1983, identified as 005, for the topcoating of metal truck chassis, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S13, and S14.
 - (6) One (1) spray coating operation, constructed in 1983, identified as 006, for the camouflage painting of metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S15, S16, S17 and S18.
 - (7) One (1) touch-up/repair spray coating operation, constructed in 1983, identified as 007, for the repair of truck body surfaces which may have been damaged in assembly or which may have defects in the quality of surface coating, or surface coating of parts for distribution as service (replacement) parts to be assembled in the field, with PM overspray controlled by dry filters, and exhausting to stack S19.
 - (8) One (1) Zinc Rich Primer Dip Booth capable of coating 4.33 units per hour, to be installed adjacent to Small Parts Prime Booth 001 of the main Hummer I plant.
 - (9) One (1) surface coating spray booth, identified as Booth 001b equipped with spray cup guns with compressed air capable of coating 26 units per hour, with PM overspray controlled by dry filters. This operation will consist of repair painting of metal parts.
 - (10) One (1) service parts booth, with a spray system and a dip tank, using dry filters to control the PM overspray emissions from the spray system.
 - (11) Metal parts blasting room capable of blasting 2.5 tons of parts per hour, using 176,250 pounds of steel and plastic abrasives per hour, with two (2) cartridge filters to control the PM and PM10 emissions.

- (12) One (1) diesel horizontal underground storage tank, with a capacity of 12,000 gallons.
 - (13) One (1) automatic transmission fluid horizontal underground storage tank, with a capacity of 10,000 gallons.
 - (14) One (1) antifreeze horizontal underground storage tank, with a capacity of 10,000 gallons.
 - (15) One (1) gasoline rectangular above ground storage tank, with a capacity of 1,500 gallons.
 - (16) One (1) diesel fuel rectangular above ground storage tank, with a capacity of 1,500 gallons.
- (b) Surface coating facilities in the Commercial HUMMER (H-1) production plant:
- (1) One (1) spray coating operation, constructed in 1991, identified as 008, for the prime coating and topcoating of metal commercial truck bodies, with a maximum capacity of 2 units per hour, with PM overspray controlled by dry filters, and exhausting to stacks S21, S22, S23, S24, S25, S26 and S27.
 - (2) One (1) spray coating operation, constructed in 1993, identified as 009, for accent and trim painting of metal commercial truck bodies, with a maximum capacity of 2 units per hour, with PM overspray controlled by dry filters, and exhausting to stacks S28 and S29.
- Insignificant Activity:
- (3) One (1) bumper booth, with dry filters to control the PM overspray emissions.
- (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.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicators of spray booths 001 - 009 and Service Parts Booth shall be limited to the following:

- (a) 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings; and
- (b) 4.3 pounds of VOCs per gallon of coating less water, for clear coatings.

D.1.2 Volatile Organic Compound (VOC) Limitations, Clean-up Requirements [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9(f) (Miscellaneous Metal Coating Operations), all solvent sprayed from the application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.3 Minor Source Modification Limit [326 IAC 2-7-10.5(d)(5)]

- (a) The total VOC input usage to Zinc Rich Primer Dip Coating Booth shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit by the Zinc Rich Primer Dip Coating Booth shall make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.
- (b) The total single HAP input usage to Zinc Rich Primer Dip Coating Booth and Booth 001b shall each be limited to less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit by the Zinc Rich Primer Dip Coating Booth and Booth 001b shall make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.
- (c) Any change or modification which may increase the combined HAPs potential to emit to 25 tons per year or more from the Zinc Rich Primer Dip Coating Booth covered in this source modification will be subject to Significant Source Modification and must be approved by the Office of Air Quality (OAQ) before such change may occur.
- (d) The total combined HAPs input usage to Booth 001b shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit by Booth 001b shall make 326 IAC 2-7-(d)10.5(f), Significant Source Modification not applicable.

D.1.4 Volatile Organic Compounds (VOC) Limitations [326 IAC 2-2]

- (a) Pursuant to CP141-5270, issued May 1, 1996, the total amount of VOC delivered to the coating applicator of booth 008 including clean up solvents, shall be limited to 3.25 tons per twelve consecutive month period with compliance determined at the end of each month. This limitation will make 326 IAC 2-2 (PSD) not applicable.
- (b) Pursuant to CP141-5270, issued May 1, 1996 and Registration CP141-3332, issued January 10, 1994, the total amount of VOC delivered to the coating applicator of booth 009 including clean up solvents, shall be limited to 24 tons per twelve consecutive month period with compliance determined at the end of each month. Any change or modification that would cause potential emissions to be greater than 25 tons per year will require prior approval by OAQ.
- (c) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), the booths 001-007, boilers 010-011, and insignificant degreasers shall have a limited potential to emit (PTE) VOC of 377 tons per twelve consecutive month period with compliance determined at the end of each month.
- (d) Pursuant to 326 IAC 2-2, the total VOC input usage to the proposed Booth 001b shall be limited to 14 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this 14 tons per twelve (12) consecutive month limit by the proposed Booth 001b and the limit of less than 25 tons per twelve (12) consecutive month in Condition D.1.3(a) by the existing Zinc Rich Primer Coating Booth as permitted in MPM 141-17181-00031 shall make 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

D.1.5 Particulate Emission Limitations [326 IAC 2-2]

- (a) The PM emissions from the Metal Parts Blasting Room shall not exceed 5.6 pounds per hour. Compliance with this limit shall render the requirements of 326 IAC 2-2,

Prevention of Significant Deterioration (PSD) not applicable.

- (b) The PM₁₀ emissions from the Metal Parts Blasting Room shall not exceed 3.3 pounds per hour. Compliance with this limit shall render the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.
- (c) The PM emissions from spray booths 008 and 009 shall each be limited to 5.6 pounds per hour, and the PM-10 emissions shall be limited to 3.3 pounds per hour. Compliance with these limits shall render the requirements of 326 IAC 2-2, Prevention of Significant Deterioration (PSD) not applicable.

D.1.6 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Metal Parts Blasting Room shall not exceed 50 pounds per hour when operating at a process weight rate of 176,250 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour;} \\ P = \text{process weight rate in tons per hour}$$

D.1.7 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 any control devices.

Compliance Determination Requirements

D.1.8 Particulate Matter (PM) Overspray [326 IAC 6-3-2(d)]

- (a) Pursuant to 326 IAC 6-3-2(d), the particulate overspray emissions from the six (6) paint booths (001 through 006) shall be controlled by water wash and shall operate the control devices in accordance with the manufacturer's specifications.
- (b) Pursuant to 326 IAC 6-3-2(d), the particulate overspray emissions from the four (4) paint booths (001b and 007 through 009), including the new Service Parts Booth shall be controlled by dry filters and the Permittee shall operate the control devices in accordance with the manufacturer's specifications.
- (c) Pursuant to 326 IAC 6-3-2(d), the particulate emissions from the Metal Blasting Room shall be controlled by cartridge filters and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

D.1.9 Volatile Organic Compounds (VOC) [326 IAC 8-1-4]

- (a) Compliance with the VOC content and usage limitations contained in Conditions D.1.1, D.1.3, and D.1.4 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 "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.
- (b) Pursuant to 326 IAC 8-1-2(7), compliance with the VOC content limit in Condition D.1.1 for spray booths 1-9 and the Service Parts Booth when using spray applicator shall be determined using a daily volume weighted average of the coatings applied.

- (c) Pursuant to 326 IAC 8-1-2(10), compliance with the VOC content limit in Condition D.1.1 for the Service Parts Booth and the Zinc Rich Primer Booth when using the dip tank may be determined using a monthly volume weighted average of the coatings applied.

This volume weighted average in (b) and (c) of this condition shall be determined using the following equation:

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

where:

- A = daily or monthly volume weighted average, lb VOC/gal coating less water
C = VOC content of coating _i, lb VOC/gal
U = actual coating _i usage, gal/day or gal/month
D = coating _i weight % water
n = no. of coatings used during the day or month

D.1.10 Testing Requirements [326 IAC 2-2]

Within sixty (60) days after achieving maximum capacity, but no later than 180 days after initial startup of the Metal Parts Blasting Room, in order to demonstrate compliance with Conditions D.1.5, the Permittee shall conduct initial performance tests to measure the PM and PM10 emission rates in pounds per hour (lbs/hr) of exhaust air from the cartridge filters controlling the Metal Parts Blasting Room, utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C - Performance Testing. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

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

D.1.11 Visible Emissions Notations

- (a) Visible emission notations of the Metal Parts Blasting Room stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions ~~is~~ are 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.1.12 Water Wash and Dry Filters Monitoring [326 IAC 2-2]

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters, and to verify the proper flow of water through the water pan of the water wash systems, proper placement and configuration of baffle panels, and other factors that affect water pan capture efficiency (e.g., debris in the water pans). To monitor the performance of the dry filters, and water wash weekly observations shall be made of the overspray from the surface coating booth stacks (S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S21, S22, S23, S24, S25, S26, S27, S28, and S29) while one or more of the booths, including the Service Parts Booth 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.

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

D.1.13 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.3, and D.1.4, the Permittee shall maintain records in accordance with (1) through (10) below. Records maintained for (1) through (10) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits established in Conditions D.1.1, D.1.3, and D.1.4.
 - (1) The amount and VOC content of each coating material and solvent used daily for coatings sprayed and monthly for coatings applied by the dip tank, purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings applied through spray application for each day;
 - (4) The volume weighted VOC content of the coatings applied from the dip tank for each month;
 - (5) The cleanup solvent/thinners usage for each day from spray application,
 - (6) The cleanup solvent/thinners usage for each month from the dip tank;

- (7) The total VOC usage for each day from spray application;
 - (8) The total VOC usage for each month from the dip tank;
 - (9) The calculated daily volume weighted average VOC content per gallon of the coatings less water as applied from spray application.
 - (10) The calculated monthly volume weighted average VOC content per gallon of the coatings less water as applied from the dip tank.
- (b) To document compliance with Condition D.1.11, the Permittee shall maintain records of visible emission notations of the Metal Parts Blasting Room stack exhaust once per day.
 - (c) Pursuant to 326 IAC 12 (New Source Performance Standards (NSPS)) 40 CFR Part 60.116b(b), Subpart Kb (Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels, Including Petroleum Liquid Storage Vessels), the Permittee shall keep readily accessible records showing the dimension of the storage tanks and an analysis showing their capacities. These records shall be kept for the life of the storage tanks.
 - (d) To document compliance with Condition D.1.12, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections of the water wash and dry filters and a statement that the rate of the liquid level and flow of the water wash was maintained according to the vendor recommended specification.
 - (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.14 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.1.3 and D.1.4 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.2 FACILITY OPERATION CONDITIONS - Natural Gas Boilers

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

- (2) Two (2) 25.2 MMBtu per hour natural gas-fired boilers, identified as 010 and 011, with no controls and exhausting to stacks S30 and S31, respectively,

Insignificant Activities:

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) Million Btu per hour, (two (2) 1.5 MMBtu/hr boilers)

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

D.2.1 Particulate Emissions (PM) [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4 (Particulate Emissions Limitations), the two (2) 25.2 MMBtu per hour natural gas-fired boilers, 010 and 011 and the two (2) insignificant boilers shall in no case exceed 0.38 pounds per million Btu heat input. This limit was established by the following equation:

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

Where: Pt = pounds of PM emitted per MMBtu heat input
Q = source max. operating capacity = 53.4 MMBtu/hr

Compliance Determination Requirements

D.2.2 Fuel Usage

Boilers 010 and 011, with capacities of 25.2 MMBtu per hour, and the insignificant 1.5 MMBtu/hr boilers shall only use natural gas as fuel. Compliance with this condition will prove compliance with 326 IAC 6-2-4.

D.2.3 Testing Requirements [326 IAC 2-7-6(1), (6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter (PM) limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

D.2.4 Natural Gas Certification

To show compliance with Condition D.2.2, the Permittee shall certify that boilers 010, and 011 have burned only natural gas for fuel.

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

D.2.5 Reporting Requirements

The natural gas fired boiler certification located at the end of this permit shall be submitted to the address listed in Section C - General Reporting Requirements, within thirty (30) days after the end of the semi-annual being reported, for each semi-annual that boilers 010 and 011 burn only natural gas for fuel.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

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

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

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), 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;
- (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.3.2 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 facility shall ensure that the following control equipment 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 (38OC) (one hundred degrees Fahrenheit (100OF));
 - (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 (38OC) (one hundred degrees Fahrenheit (100OF)), 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 (38OC) (one hundred degrees Fahrenheit (100OF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9OC) (one hundred twenty degrees Fahrenheit (120OF)):
 - (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 or 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 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.

Compliance Determination Requirements

D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Volatile Organic Compound (VOC) limits specified in Conditions D.3.1 and D.3.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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

D.3.4 Monitoring

Monitoring of this facility is not specifically required by this permit. However, any change or modification to this facility as specified in 326 IAC 2-1 may require this facility to have monitoring requirements.

SECTION D.4

FACILITY OPERATION CONDITIONS

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

Insignificant Activities:

- (3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (4) Detail sanding prep for paint.

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

D.4.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the welding and sanding operations shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Compliance Determination Requirement

D.4.2 Testing Requirements [326 IAC 2-7-6(1), (6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the Particulate Matter (PM) limit specified in Condition D.4.1 shall be determined by a performance test 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.4.3 Record Keeping and Reporting Requirements

There are no record keeping or reporting requirements for this facility.

SECTION D.5 GENERAL CONSTRUCTION CONDITIONS

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

(c) HUMMER II vehicle production plant:

- (2) Miscellaneous natural gas-fired low NO_x process ovens and various heaters, with a total heat input of 109 mmBtu/hr, and low NO_x Thermal Oxidizer with a total heat input of 9.7 mmBtu/hr;
- (3) Body Shop - This is where the first major step of the assembly process will be performed, metal body components of the HUMMER II vehicle (i.e. door, deck lid, hood, roof, and side panels and frame) will be supplied by off-site contractors. Various types of welding, resistance spot welding, metal grinding/brazing will be performed;

(4) Painting Operations:

- (A) Electrodeposition dip prime process (E-Coat/ELPO) (Category #3)- Pre-clean wash, using a mixture of water and water reducible detergents and phosphate application. These cleaners are applied to the vehicle surface using a combination of spray nozzles and/or dip tanks, to remove oils and grease that may have accumulated on the vehicle parts.

The prime coating system (E-Coat/ELPO), which follows the phosphate cleaning will utilized waterborne coatings made up of a mixture of resins, pigments and water. The coated vehicle will then enter the E-Coat/ELPO drying oven.

The VOC and HAPs emissions from the Electrodeposition dip prime process (E-Coat/ELPO), and the E-Coat/ELPO drying oven will be controlled by a Regenerative Thermal Oxidizer.

- (B) Primer (Category #4) - Body sealers and/or fillers, prep operation which involves scuff sanding and manual wiping using solvent and tack cloths to remove particles, then to antichip booth, then to primer booth where the exterior will be painted and primer drying oven. The coating will be manually applied or will use automatic spray systems.

The VOC and HAPs emissions from the Primer automatic zones and from the curing oven will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a water wash.

- (C) Topcoat System (Category #5) - This system will consists of a preparation area, which involves minor scuffing and manual wiping using solvent and tack cloths to remove particles and/or otherwise prepare the surface for painting, basecoat spray booth, clearcoat spray booth, flash-off area and natural gas-fired drying oven, repair/polish. The coating will be applied to the vehicle parts using various types of spray applicators.

The VOC and HAPs emissions from the basecoat/clearcoat automatic spray application zones and from the curing oven of the topcoat system will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a water wash.

- (D) Vehicle Fluid Filling (Category #7) - Where gasoline, diesel, antifreeze, transmission fluid, windshield washer fluid, power steering fluid, brake fluid, engine oil, will be filled into the vehicles.
- (E) Final and Spot Repair (Category #8) - This includes, off-line spot and three (3) final repair stations, identified as No.1, No.2, and No.3. The PM overspray from this system will be controlled by dry filters.
- (F) Assembly Final Line (Category #9) - After the paint shop, the painted vehicle components are routed to general assembly. General assembly consists of interior and exterior trim components and glass installation, chassis, wheel/tires, powertrain and final line assembly operations. The Vehicle start-up and roll test verifies if powertrain is installed correctly.
- (G) Miscellaneous Solvent Purge Usage and Cleanup (Category #10)- Solvents will be used in the body shop, paint shop, oven cleaning, general assembly areas and routine housekeeping. In the paint shop the purge material is reclaimed internally or externally to the spray application equipment.
- (H) Miscellaneous Sealers and Adhesives (Category #11) – Various sealers and adhesives will be used throughout the assembly process. Majority of these sealers and adhesives will be used in the paint shop. A special sealant will be used in the vehicle glass installation. These materials will be either air-dried or oven cured.
- (I) Bulk Storage Tanks (Category #12) - Submerged fill pipes, and conservation vents on these tanks to further minimize VOC and HAPs emissions. Stage I vapor controls will also be installed where appropriate.
 - (i) One (1) purge solvent vertical fixed roof above ground storage tank, ID 101, with a capacity of 10,000 gallons.
 - (ii) One (1) unleaded gasoline vertical fixed roof above ground storage tank, ID 102, with a capacity of 10,000 gallons.
 - (iii) One (1) antifreeze (ethylene glycol) vertical fixed roof above ground storage tank, ID 103, with a capacity of 8,000 gallons.
 - (iv) One (1) window washer vertical fixed roof above ground storage tank, ID 104, with a capacity of 3,000 gallons.
 - (v) One (1) transmission fluid vertical fixed roof above ground storage tank, ID 105, with a capacity of 3,000 gallons.
 - (vi) One (1) power steering fluid vertical fixed roof above ground storage tank, ID 106, with a capacity of 3,000 gallons.
 - (vii) One (1) waste solvent vertical fixed roof above ground storage tank, ID 107, with a capacity of 10,000 gallons.

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

D. 5.1 PSD BACT Limit [326 IAC 2-2]

Pursuant to the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 the

HUMMER II plant shall be limited as follows:

- (a) The HUMMER II plant production rate shall be limited to 86,000 vehicles per 12-consecutive month period, rolled on a monthly basis. Daily maximum production shall not exceed 364 vehicles.
- (b) The volatile organic material (VOC) usages, and natural gas usages from the HUMMER II plant shall be limited such that the summation of the VOC emissions from all facilities at this plant shall not exceed 260 tons per 12-month period, rolled on a monthly basis.
- (c) The limitations for the following HUMMER II surface coating facilities shall be as follows:

Facilities/Operations	Controlled VOC Limit (Pounds of VOC/Gallon Applied Coating Solids)
E-Coat/ELPO System	0.04
Primer /Topcoat System	4.5

The VOC limit in pounds of VOC/gallon applied coating solids shall be determined on a daily-volume-weighted average and actual transfer efficiencies.

- (d) The Regenerative Thermal Oxidizer (RTO) used to control VOC emissions from the E-Coat/ELPO and Primer/Topcoat paint systems shall achieve a minimum VOC destruction efficiency of 95%.
- (e) Good Work Practices To Reduce VOC Emissions:
 - (1) Conservation vents, submerged fill pipes and Stage I Vapor Recovery System where appropriate shall be installed for the gasoline storage tanks.
 - (2) The use of robotic paint application system to minimize paint usage.
 - (3) Capturing of paint lines cleaning solvent for recycling.
 - (4) Capturing of solvent purged from paint lines for off-site recycling and/or other processing.
 - (5) The use of masking material to protect certain equipment, walls, and floors around the booths from overspray, thus reducing the cleaning solvent usage.
 - (6) The use of water-based coatings when feasible.
 - (7) Water blasting of vehicle carriers.
 - (8) The use of closed containers to store or dispose of cloth, paper, or other materials impregnated with VOC.
 - (9) The use of Stage 2 Recovery System in the fluid filling operation.
 - (10) Minimizing spills in the vehicle fluid filling operation.

- (11) Closing the receiving vessel after it has been filled with the fluid.
- (12) 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.
- (13) Minimization of major paint repair.

Compliance with sections (a) through (e) of this PSD BACT condition and condition D.6.3 of this permit shall satisfy 326 IAC 2-2, the Prevention of Significant Deterioration Requirements.

D.5.2 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volume weighted average volatile organic compound (VOC) content of coating applied to the metal part of the HUMMER II from facilities listed in items (c)(4)(A), (c)(4)(B), (c)(4)(C), and (c)(4)(H) shall be limited as follows:

Type of Coating	VOC Emissions Limit (pounds per gallon of coatings less water)
Clear Coatings	4.3
Forced Warm Air Dried Coatings	3.5
Air Dried Coatings	3.5
Extreme Performance Coatings	3.5
All Other Coating	3.0

- (b) The VOC input usage from the off-line Spot and three (3) Final Repair Stations, identified as No. 1, No. 2, and No. 3 (Category #8) shall be limited to a total of less than 15 pounds per day (lbs/day). Compliance with this limit shall make 326 IAC 8-2-9 (Miscellaneous Metal Coating) not applicable. This limit shall also satisfy the PSD BACT limit.
- (c) Solvent sprayed from application equipment during cleanup or color changes shall be directed into appropriately designed reclaim equipment. Such equipment shall be designed to effectively capture purge solvent and minimize evaporation. The waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.5.3 Volatile Organic Compounds [326 IAC 8-1-2(a)]

Pursuant to 326 IAC 8-1-2(a), the Primer/Topcoat System combined VOC emission limitations specified under 326 IAC 8-2-9 in Condition D.5.2 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.5.4 Particulate Emission Limitation, Work Practices and Control Technologies [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), the particulate overspray emissions from the Primer/Topcoat System, Spot and Final Repair operations shall be controlled by water wash and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

D.5.5 Gasoline Dispensing Facilities [326 IAC 8-4-6]

- (a) Pursuant to 326 IAC 8-4-6(b) - No owner or operator shall allow the transfer of gasoline between any transport and any storage tank unless such tank is equipped with the following:
- (1) A submerge 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.
- (b) It shall be the responsibility of the owner or operator of the transport to make certain that the vapor balance system is connected between the transport and the storage tank and is operating according to the manufacturer's specifications.
- (c) The Permittee shall install submerged fill pipes and pressure relief valves on the gasoline storage tank and shall employ a vapor balancing system for gasoline tank truck unloading activities.

D.5.6 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 control devices.

Compliance Determination Requirements

D.5.7 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11] [326 IAC 2-2]

- (a) Compliance stack tests shall be performed on the Regenerative Thermal Oxidizer (RTO) to determine the operating temperature that will achieve the following destruction efficiency and to determine the capture system efficiency for the coating systems to verify compliance with the VOC limits in Conditions D.5.1 and D.5.2:

Facility	Destruction Efficiency
E-Coat/ELPO	95%
Primer/Topcoat System	95%

- (b) The Compliance stack tests for the Primer/Topcoat System in (a) of this condition shall be made utilizing Method 25 for destruction efficiency, and or other methods as approved by the Commissioner for capture efficiency. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

- (c) The compliance stack tests shall be performed on the Primer/Topcoat, for PM and PM-10 utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner. The PM and PM10 testing is required to demonstrate that the source is not major for either pollutant, under 326 IAC 2-2, Prevention of Significant Deterioration. PM-10 includes filterable and condensable PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

The compliance tests required in (a) and (b) of this condition shall be conducted within 60 days, after the issuance of Significant Permit Modification 141-22830-00031.

D.5.8 Volatile Organic Compounds (VOC)

- (a) Compliance with the VOC content and usage limitations contained in Conditions D.5.1 and D.5.2 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.5.1(c) shall be determined using daily volume weighted average of the total mass of VOC emitted per volume of coating solids applied daily and shall be determined using the following equation:

$$G = \frac{\sum_{i=1}^n L_{ci} * D_{ci} * W_{ci} (1-CE)}{\sum_{i=1}^n L_{ci} * V_{si} * T_{ci}}$$

where:

- G = volume weighted average mass of VOC per volume of applied solids (pounds per gallon),
 L_{ci} = volume of each applied coating (i) consumed, as received (gallons),
 D_{ci} = density of each applied coating (i) as received
 W_{oi} = proportion of each applied VOC by weight in each coating (i), as received (pounds VOC / pounds coating),
CE = overall control efficiency
 V_{si} = proportion of each applied solids by volume in each coating (i) as received (gallons solids / gallon coating),
 T_{ci} = transfer efficiency for each applied coating (i),

- (c) Pursuant to 326 IAC 8-1-2(7), compliance with the VOC content limit in Condition D.5.2 for coatings applied through spray application system shall be determined using a daily volume weighted average of the coatings applied.
- (d) Pursuant to 326 IAC 8-1-2(10), compliance with the VOC content limit in Condition D.5.2 for coatings applied through dip coating or electrodeposition may be determined using a monthly volume weighted average of the coatings applied.

This volume weighted average in (c) and (d) of this condition shall be determined using the following equation:

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

where:

A = daily or monthly volume weighted average, lb VOC/gal coating less water
C = VOC content of coating _i, lb VOC/gal
U = actual coating _i usage, gal/day or gal/month
D = coating _i weight % water
n = no. of coatings used during the day or month
CE= overall control efficiency of the control system

D.5.9 Thermal Oxidizer Temperature [326 IAC 2-2]

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer 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 Permittee shall operate the thermal oxidizer at or above the three (3) hourly average temperature of 1350°F.
- (b) The Permittee shall determine the three (3) hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.5.1, 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) hourly average temperature as observed during the compliant stack test.

D.5.10 Parametric Monitoring [326 IAC 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.5.1, as approved by IDEM.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

D.5.11 Volatile Organic compounds [326 IAC 2-2]

- (a) The Regenerative Thermal Oxidizer (RTO) shall be in operation at all times when the E-Coat/ELPO System and the automatic zones for the Primer/Topcoat System are in operation.
- (b) The RTO shall be calibrated, operated and maintained in accordance with the manufacturer's specifications.

D.5.12 Particulate Overspray

- (a) The water wash shall be in operation or in place at all times when the Primer/Topcoat System is in operation.

- (b) The dry filters shall be in place at all times the Final and Spot Repair System are in operation.

Compliance Monitoring Requirements

D.5.13 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters, and to verify the proper flow of water through the water pan of the water wash systems, proper placement and configuration of baffle panels, and other factors that affect water pan capture efficiency (e.g., debris in the water pans). To monitor the performance of the dry filters, and water wash weekly observations shall be made of the overspray from the primer and topcoat (basecoat and clearcoat manual zones) and in-line ("spot") repair booths stacks 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.

Record Keeping and Reporting Requirements

D.5.14 Record Keeping Requirements

- (a) To document compliance with Conditions D.5.1 and D.5.2(b), the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be sufficient to establish compliance with the VOC usage, vehicle production limits, and the VOC emission limits established in Conditions D.5.1 and D.5.2(b).
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (2) A log of the dates of use.
 - (3) The VOC usage each day from the Final and Spot Repair.
 - (4) The cleanup solvent usage for each month.
 - (5) The total VOC usage for each month.
 - (6) The weight of VOCs emitted for each compliance period.
 - (7) Vehicle production for each day and month.
- (b) To document compliance with Conditions D.5.1(c) and D.5.2(a), the Permittee shall

maintain records in accordance with (1) through (11) below. Records maintained for (1) through (11) shall be sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.5.1(c) and D.5.2(a).

- (1) The amount and VOC content of each coating material and solvent used daily for coatings sprayed and monthly for coatings applied by the dip tank, purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (2) A log of the dates of use.
 - (3) The volume weighted VOC content of the coatings applied through spray application for each day.
 - (4) The volume weighted VOC content of the coatings applied from the dip tank for each month.
 - (5) The cleanup solvent/thinners usage for each day from spray application.
 - (6) The cleanup solvent/thinners usage for each month from the dip tank.
 - (7) The total VOC usage for each day from spray application.
 - (8) The total VOC usage for each month from the dip tank.
 - (9) The calculated daily volume weighted average VOC content per gallon of the coatings less water as applied from spray application.
 - (10) The calculated monthly volume weighted average VOC content per gallon of the coatings less water as applied from the dip tank.
 - (11) The calculated daily volume weighted average emissions in pounds per gallon coating solids.
- (c) To document compliance with Condition D.5.13, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections of the water wash and dry filters and a statement that the rate of the liquid level and flow of the water wash was maintained according to the vendor recommended specification.
- (d) To document compliance with Condition D.5.9, the Permittee shall maintain continuous temperature records (on a three (3) hour average basis) for the thermal oxidizer and the three (3) hour average temperature used to demonstrate compliance during the most recent compliant stack test.
- (e) To document compliance with Condition D.5.10, the Permittee shall maintain daily records of the duct pressure or fan amperage.
- (f) Pursuant to 326 IAC 12 (New Source Performance Standards (NSPS)) 40 CFR Part 60.116b(b), Subpart Kb (Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels, Including Petroleum Liquid Storage Vessels), the Permittee shall keep readily accessible records showing the dimension of the storage tanks (ID 101 through ID 107) and an analysis showing their capacities. These records shall be kept for the life of the storage tanks.

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

D.5.15 Reporting Requirements

A monthly summary of the information to document compliance with Condition D.5.1 and D.5.2(b) 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

Operation Conditions

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

(b) General List of Trivial/Insignificant Activities:

- (1) Production of hot water for on-site personal use not related to any industrial or production process.
- (2) Portable electrical generators that can be moved by hand from one location to another.
do not remove air pollutants.
- (3) 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
- (4) Air vents from air compressors.
- (5) Fuel use related to food preparation for on-site consumption.
- (6) Activities performed using hand-held equipment including the following:
Application of hot melt adhesives with no VOC in the adhesive formulation
 - Drilling - Routing - Surface grinding
 - Grinding - Sanding
 - Machining wood, metal or plastic - Sawing
 - Polishing - Turning wood, metal or plastic
- (7) 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:
 - Activities associated with the repair and maintenance of paved and unpaved roads, including paving or sealing, or both or parking lots and roadways.
 - Painting, including interior and exterior paintings or buildings, and solvent use, excluding degreasing operations utilizing halogenated organic solvents.
 - Brazing, soldering, or welding operations and associated equipment.
 - Batteries and battery charging stations, except at battery manufacturing plants.
 - Lubrications, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.
- (8) Office related including the following:
 - Office supplies and equipment.
 - Photocopying equipment and associated supplies.
 - Paper shredding.

 - Blueprint machines, photographic equipment, and associated supplies.
- (9) Lawn care and landscape maintenance activities and equipment, including the storage, spraying, or application of insecticides, pesticides, and herbicides.
- (10) Storage equipment and activities including:
 - Pressurized storage tanks and associated piping for anhydrous ammonia, acetylene, carbon monoxide, chlorine, inorganic compounds, liquid natural gas (LNG)(Propane), liquid petroleum gas (LPG), natural gas, nitrogen dioxide and

- sulfur dioxide.
 - Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP.
 - Storage tanks, reservoirs, and pumping and handling equipment of any size containing soap, wax, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions provided appropriate lids and covers are utilized.
 - Storage of drums containing maintenance raw materials.
 - Storage of castings, Lance rods, or any non-HAP containing material in solid form stored in a sealed or covered container.
- (11) Emergency and standby equipment including:
- Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.
 - Vacuum producing devices for the purpose of removing potential accidental releases
- (12) Activities associated with production including the following:
- Closed, non-vented, tumblers used for cleaning or deburring metal products without abrasive blasting.
 - Electrical resistance welding.
 - Application equipment for hot melt adhesives with no VOC in the adhesive formulation.
 - Compressor or pump lubrication and seal oil systems.
 - Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
 - Equipment for washing or drying fabricated glass or metal products, if no VOCs or HAPs are used in the process, and no gas, oil, or solid fuel is burned.
- (13) Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following:
Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOCs and HAPs.
- Electric or steam heated drying ovens and autoclaves, including only the heating emissions and not any associated process emissions.
 - Application equipment for hot melt adhesives with no VOC in the adhesive formulation.
- (14) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (15) A petroleum fuel, other than gasoline dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (16) The following VOC and HAP storage containers:
- Storage tanks with capacity less than 1,000 gallons and annual throughput less than 12,000 gallons.
 - Vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids.
- (17) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (18) Machining where an aqueous cutting coolant continuously floods the machining

interface.

- (19) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (20) Cleaners and solvents characterized as follows:
 - having a vapor pressure equal to or less than 2 kPa; 15 mmHg, or 0.3 psi measured at 38 degrees C (100 OF) or
 - having a vapor pressure equal to or less than 0.7 kPa; 5 mmHg; or 0.1 psi measured at 20 OC (68 OF).
 - The used of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months
- (21) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (22) Closed loop heating and cooling systems.
- (23) Infrared cure equipment.
- (24) Exposure chambers for curing of ultraviolet inks and ultra-violet coatings where heat is the intended discharge.
- (25) Solvent recycling systems with bath capacity less than or equal to 100 gallons.
- (26) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (27) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.
- (28) Non-contact cooling tower systems with either of the following:
 - Natural draft cooling towers not regulated under a NESHAP
 - Forced and induced draft cooling tower system not regulated under a NESHAP.
- (29) Heat exchanger cleaning and repair.
- (30) Process vessel degassing and cleaning to prepare for internal repairs.
- (31) Paved and unpaved roads and parking lots with public access
- (32) Purging of gas lines and vessels that is related to routine 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
- (33) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators tank and fluid handling equipment.
- (34) Emergency generators as follows: Gasoline generators not exceeding 110 horsepower, diesel generators not exceeding 1,600 horsepower, natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
- (35) 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.

- Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.

(c) Plant Specific Trivial / Insignificant Activities

- (1) Sludge room water treatment (Emissions accounted for in the emission determinations at each respective source)
- (2) Sludge room (Emissions accounted for in the emission determinations at each respective source)
- (3) Laboratories
- (4) Print/Copy shops
- (5) Wet/dry sanding booths
- (6) Open metal grinding - Performed in the body shop
- (7) Resistance Welding - Majority of welding operations performed in the body shop
- (8) Property Maintenance - Landscaping, paving, roofing, and painting
- (9) Material Storage
- (10) Paint Mix Rooms (Emissions accounted for in the emission determinations at each respective source)
- (11) Non-VOC parts washing.
- (12) Equipment maintenance lube/degreaser.
- (13) Vehicle washers prior to shipping.
- (14) Vehicle fluid fill operations:
 - Engine oil - Brake fluid
 - Windshield fluid - Air conditioning refrigerant
 - Engine coolant - Power steering fluid
- (15) Storage tanks for brake fluid, gear oil and engine oil.
- (16) Engine sub-assembly line - Assembly of engine components.
- (17) Radiator sub-assembly line - Assembly of radiator components.
- (18) Trim assembly line - Installation of various interior/exterior vehicle components.
- (19) Paint pump repair shop.

- (20) Leak test areas.
- (21) Pre-washers.
- (22) Spot sanding and painting.
- (23) Phosphate system.
- (24) Masking and polishing areas
- (25) Turbo blower - Power blowing of vehicle.
- (26) Dolly touch-up.
- (27) Dolly cleaning (water blast) - Cleaning of vehicle carrier.
- (28) Inspection and audit areas.
- (29) Emergency generators less than 1600 hp and fire pumps.

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

Boilers

Natural gas-fired boilers less than 10 MMBtu/hr

Emission Limitation and Standards

D.6.1 Particulate Matter (PM)

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating, all the boilers with heat input rating of less than ten (10) mmBtu/hr each shall have a PM emissions limit to be determined by the following equation:

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

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.

Degreasing operations And certain cleaners and solvents, that do not exceed 145 gallons usage per 12 months, except if subject to 326 IAC 20-6):

D.6.2 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), 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;

- (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.6.3 PSD BACT

The PSD BACT for the insignificant activities shall be as follows:

- (a) Gasoline fuel transfer and dispensing operation shall not exceed 1,300 gallons per day.
- (b) The petroleum fuel dispensing facility, shall not exceed a storage capacity greater 10,500 gallons, and shall not dispense fuel greater than 230,000 gallons per month.
- (c) Storage tanks with capacity less than 1,000 gallons shall have annual throughput less than 12,000 gallons. This shall include vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids.
- (d) Cleaners and solvents used in this section shall have a vapor pressure equal to or less than 2 kPa; 15 mmHg, or 0.3 psi measured at 38 degrees C (100 °F) or shall have a vapor pressure equal to or less than 0.7 kPa; 5 mmHg; or 0.1 psi measured at 20 °C (68 °F).

The used of which for all cleaners and solvents combined shall not exceed 145 gallons per 12 months.

- (e) Compliance with this condition and condition D.5.1 of this permit shall satisfy 326 IAC 2-2, the Prevention of Significant Deterioration.

D.6.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) The PM overspray emissions from the surface coating, painting, dipping, or spraying operation under the insignificant activities shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the grinding, machining, sanding, soldering, welding facilities shall individually be determined using the equation in D.6.4(a) :

Compliance Determination Requirement

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

The Permittee is not required to test any of the facilities in SECTION D.6 by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Conditions D.6.1 and D.6.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements

D.6.6 Record Keeping Requirement

- (a) To document compliance with Conditions D.6.1 and D.6.3 the Permittee shall maintain records of the amount of raw materials (process weight), paint, solvent, weld sticks, abrasives, etc. Records shall include purchase orders, invoices. Records maintained shall be taken monthly and shall be complete.
- (b) These records shall be maintained in accordance with Section C - General Record Keeping Requirements of the issued Part 70 permit.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

- (a) Surface coating facilities in the Military HUMMER (H-1) vehicle production plant:
- (1) One (1) spraying and dipping operation, constructed in 1983, identified as 001, for the prime coating of small metal parts, with PM overspray from the spraying controlled by water wash, and exhausting at stacks S1 and S2.
 - (2) One (1) spraying and dipping operation, constructed in 1983, identified as 002, for the topcoating of small metal parts, with a maximum capacity of 12.5 units per hour, with PM overspray from the spraying controlled by water wash, and exhausting at stacks S3 and S4.
 - (3) One (1) spray coating operation, constructed in 1983, identified as 003, for the prime coating of 1.25 ton metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S5, S6, S7 and S8.
 - (4) One (1) spray coating operation, constructed in 1983, identified as 004, for the topcoating of metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S9, S10, S11 and S12.
 - (5) One (1) spray coating operation, constructed in 1983, identified as 005, for the topcoating of metal truck chassis, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S13, and S14.
 - (6) One (1) spray coating operation, constructed in 1983, identified as 006, for the camouflage painting of metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S15, S16, S17 and S18.
 - (7) One (1) touch-up/repair spray coating operation, constructed in 1983, identified as 007, for the repair of truck body surfaces which may have been damaged in assembly or which may have defects in the quality of surface coating, or surface coating of parts for distribution as service (replacement) parts to be assembled in the field, with PM overspray controlled by dry filters, and exhausting to stack S19.
 - (8) One (1) Zinc Rich Primer Dip Booth capable of coating 4.33 units per hour, to be installed adjacent to Small Parts Prime Booth 001 of the main Hummer I plant.
 - (9) One (1) surface coating spray booth, identified as Booth 001b equipped with spray cup guns with compressed air capable of coating 26 units per hour, with PM overspray controlled by dry filters. This operation will consist of repair painting of metal parts.

- (10) One (1) service parts booth, with a spray system and a dip tank, using dry filters to control the PM overspray emissions from the spray system.
- (b) Surface coating facilities in the commercial HUMMER (H-1) vehicle production plant:
 - (1) One (1) spray coating operation, constructed in 1991, identified as 008, for the prime coating and topcoating of metal commercial truck bodies, with a maximum capacity of 2 units per hour, with PM overspray controlled by dry filters, and exhausting to stacks S21, S22, S23, S24, S25, S26 and S27.
 - (2) One (1) spray coating operation, constructed in 1993, identified as 009, for accent and trim painting of metal commercial truck bodies, with a maximum capacity of 2 units per hour, with PM overspray controlled by dry filters, and exhausting to stacks S28 and S29.
- (d) HUMMER II vehicle production plant:
 - (4) Painting Operations:
 - (A) Electrodeposition dip prime process (E-Coat/ELPO) (Category #3) - Pre-clean wash, using a mixture of water and water reducible detergents and phosphate application. These cleaners are applied to the vehicle surface using a combination of spray nozzles and/or dip tanks, to remove oils and grease that may have accumulated on the vehicle parts.

The prime coating system (E-Coat/ELPO), which follows the phosphate cleaning will utilized waterborne coatings made up of a mixture of resins, pigments and water. The coated vehicle will then enter the E-Coat/ELPO drying oven.

The VOC and HAPs emissions from the Electrodeposition dip prime process (E-Coat/ELPO), and the E-Coat/ELPO drying oven will be controlled by a Regenerative Thermal Oxidizer.
 - (B) Primer (Category #4) - Body sealers and/or fillers, prep operation which involves scuff sanding and manual wiping using solvent and tack cloths to remove particles, then to antichip booth, then to primer booth where the exterior will be painted and primer drying oven. The coating will be manually applied or will use automatic spray systems.

The VOC and HAPs emissions from the Primer automatic zones and from the curing oven will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a water wash.
 - (C) Topcoat System (Category #5) - This system will consists of a preparation area, which involves minor scuffing and manual wiping using solvent and tack cloths to remove particles and/or otherwise prepare the surface for painting, basecoat spray booth, clearcoat spray booth, flash-off area and natural gas-fired drying oven, repair/polish. The coating will be applied to the vehicle parts using various types of spray applicators.

The VOC and HAPs emissions from the basecoat/clearcoat automatic spray application zones and from the curing oven of the topcoat system will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a water wash.

- (E) Final and Spot Repair (Category #8) - This includes, off-line spot and three (3) final repair stations, identified as No.1, No.2, and No.3. The PM overspray from this system will be controlled by dry filters.

Under rule 40 CFR 63, subpart Mmmm, all emission units in this SECTION are considered existing units in an existing affected source.

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

E.1.1 General Provisions Relating to NESHAP Mmmm [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 of 40 CFR Part 63, Subpart Mmmm in accordance with schedule in 40 CFR 63, Subpart Mmmm.

E.1.2 Surface Coating of Plastic Parts and Products NESHAP [40 CFR Part 63, Subpart Pppp]

The Permittee which engages in surface coating of plastic parts and products shall comply with the provisions of 40 CFR Part 63, Subpart Mmmm, in order to demonstrate compliance with 40 CFR Part 63, Subpart Pppp.

E.1.3 Surface Coating of Miscellaneous Metal Parts and Products NESHAP [40 CFR Part 63, Subpart Mmmm]

The Permittee which engages in coating metal parts of the HUMMER vehicle shall comply with the provisions of 40 CFR Part 63, Subpart Mmmm as follows:

§ 63.3880 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.3881 Am I subject to this subpart?

- (a) Miscellaneous metal parts and products include, but are not limited to, metal components of the following types of products as well as the products themselves: motor vehicle parts and accessories, bicycles and sporting goods, recreational vehicles, extruded aluminum structural components, railroad cars, heavy duty trucks, medical equipment, lawn and garden equipment, electronic equipment, magnet wire, steel drums, industrial machinery, metal pipes, and numerous other industrial, household, and 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 miscellaneous metal parts or products, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (6) 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 high performance, magnet wire, rubber-to-metal, or extreme performance fluoropolymer coating operations.

(3)

(4)

(5)

(6)

- (b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3882, that uses 946 liters (250 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal 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 §63.3981 in determining whether you use 946 liters (250 gal) per year, or more, of coatings in the surface coating of miscellaneous metal parts and products.

(c)

(1)

(2)

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(12)

(13)

(14)

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(16)

(17)

(d)

(e)

§ 63.3882 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 §63.3881(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 miscellaneous metal parts and products within each subcategory.
 - (1) All coating operations as defined in §63.3981;
 - (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 affected source if you commenced its construction after August 13, 2002 and the construction is of a completely new miscellaneous metal parts and products surface coating facility where previously no miscellaneous metal parts and products surface coating facility had existed.
- (d) An affected source is reconstructed if it meets the criteria as defined in §63.2.
- (e) An affected source is existing if it is not new or reconstructed.

§ 63.3883 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 §§63.3940, 63.3950, and 63.3960.

(a)

(1)

(2)

(b) For an existing affected source, the compliance date is the date 3 years after January 2, 2004.

(1)

(2)

- (c)
- (d) You must meet the notification requirements in §63.3910 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

§ 63.3890 What emission limits must I meet?

- (a)
- (b) For an existing affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (b)(1) through (5) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.3941, §63.3951, or §63.3961.
 - (1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
 - (2)
 - (3)
 - (4)
 - (5)

(c)

§ 63.3891 What are my options for meeting the emission limits?

You must include all coatings (as defined in §63.3981), 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 §63.3890. 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 §63.3930(c), and you must report it in the next semiannual compliance report required in §63.3920.

- (a)
- (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 §63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis. You must meet all the requirements of §§63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limit using this option.
- (c)

§ 63.3892 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)
- (c)

§ 63.3893 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)
- (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

§ 63.3900 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 §63.3891(a) and (b), must be in compliance with the applicable emission limit in §63.3890 at all times.
 - (2)
- (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)

§ 63.3901 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

§ 63.3910 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. For an existing affected source, you must submit the initial notification no later than 1 year after January 2, 2004. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (Subpart

III of this part) as provided for under §63.3881(d) to constitute compliance with this subpart for any or all of your metal 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 metal parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under §63.3881(e)(2) to constitute compliance with this subpart for your metal 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 metal 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 §§63.3940, 63.3950, or 63.3960 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 §§63.3940, 63.3950, or 63.3960 that applies to your affected source.
 - (4) Identification of the compliance option or options specified in §63.3891 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 §63.3890, include all the calculations you used to determine the kg (lb) of organic HAP emitted per liter (gal) 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 §63.3941(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) Volume fraction of coating solids for one coating.
 - (iii) Density for one coating, one thinner and/or other additive, and one leaning 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 §63.3951.
- (8) The calculation of kg (lb) of organic HAP emitted per liter (gal) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.
- (i)
 - (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 volume 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 §63.3951.
 - (iii)
- (9)
- (10) If you are complying with a single emission limit representing the predominant activity under §63.3890(c)(1), include the calculations and supporting information used to demonstrate that this emission limit represents the predominant activity as specified in §63.3890(c)(1).
- (11)

§ 63.3920 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 §63.3940, §63.3950, or §63.3960 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 §63.3891 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 (§63.3891(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 (§63.3890(c)(1)), include the annual determination of predominant activity if it was not included in the previous semi-annual compliance report.
- (4) *No deviations.* If there were no deviations from the emission limitations in §§63.3890, 63.3892, and 63.3893 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.
- (5)
- (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 §63.3890, 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 §63.3890.
 - (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 §63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(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)
- (b)
- (c)

§ 63.3930 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 §63.3890(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 §63.3890(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 volume fraction of coating solids for each coating. 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. 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)
 - (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 §63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of §63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.3951.
 - (4)
- (d) A record of the name and volume 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 volume 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 unless the material is tracked by weight.
- (f) A record of the volume fraction of coating solids for each coating used during each compliance period.
- (g) If you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period.
- (h) If you use an allowance in Equation 1 of §63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to §63.3951(e)(4), you must keep records of the information specified in paragraphs (h)(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 §63.3951; 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 §63.3951.
- (3) The methodology used in accordance with §63.3951(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.
- (i) [Reserved]
- (j) You must keep records of the date, time, and duration of each deviation.
- (k)

§ 63.3931 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

§ 63.3940

§ 63.3941

§ 63.3941

Compliance Requirements for the Emission Rate Without Add-On Controls Option

§ 63.3950 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 §63.3951. The initial compliance period begins on the applicable compliance date specified in §63.3883 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 volume 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 §63.3951 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 §63.3890.

§ 63.3951 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 §63.3890, but is not required to meet the operating limits or work practice standards in §§63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(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 §63.3941(a).
- (b) *Determine the volume fraction of coating solids.* Determine the volume fraction of coating solids (liter (gal) of coating solids per liter (gal) of coating) for each coating used during each month according to the requirements in §63.3941(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 you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM Method D5965–02, “Standard Test Methods for Specific Gravity of Coating Powders” (incorporated by reference, see §63.14), or information from the supplier. If there is disagreement between ASTM Method D1475–98 or ASTM Method D5965–02 test results 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, and 1C 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.

$$H_e = A + B + C - R_w \quad (Eq. 1)$$

Where:

H_e = 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.

R_w = 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 R_w 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:

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

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

$Vol_{c,i}$ = Total volume of coating, i , used during the month, liters.

$D_{c,i}$ = Density of coating, i , kg coating per liter coating.

$W_{c,i}$ = Mass fraction of organic HAP in coating, i , kg organic HAP per kg coating.
For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to Subpart P of this part.

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:

$$B = \sum_{j=1}^n (Vol_{t,j}) (D_{t,j}) (W_{t,j}) \quad (Eq. 1B)$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

Vol_{t,j} = Total volume of thinner and/or other additive, j, used during the month, liters.

D_{t,j} = Density of thinner and/or other additive, j, kg per liter.

W_{t,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 §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to Subpart PPPP of this part.

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:

$$C = \sum_{k=1}^p (Vol_{s,k}) (D_{s,k}) (W_{s,k}) \quad (Eq. 1C)$$

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.

D_{s,k} = Density of cleaning material, k, kg per liter.

W_{s,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 §63.3930(h). 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 volume of coating solids used.* Determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$V_{st} = \sum_{i=1}^m (Vol_{c,i}) (V_{s,i}) \quad (Eq. 2)$$

Where:

V_{st} = Total volume of coating solids used during the month, liters.

$Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.

$V_{s,i}$ = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3941(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 liter (gal) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}} \quad (Eq. 3)$$

Where:

H_{yr} = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.

H_e = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.

V_{st} = Total volume of coating solids used during month, y, liters, 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 §63.3890 or the predominant activity or facility-specific emission limit allowed in §63.3890(c). You must keep all records as required by §§63.3930 and 63.3931. As part of the notification of compliance status required by §63.3910, 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 §63.3890, determined according to the procedures in this section.

§ 63.3952 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 §63.3951(a) through (g), must be less than or equal to the applicable emission limit in §63.3890. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.3950 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.3951(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 §63.3890(c), you must also perform the calculation using Equation 1 in §63.3890(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 §63.3890, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(6).
- (c) As part of each semiannual compliance report required by §63.3920, 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 §63.3890, determined according to §63.3951(a) through (g).
- (d) You must maintain records as specified in §§63.3930 and 63.3931.

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§ 63.3980 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 §63.3881 through 3883 and §63.3890 through 3893.
 - (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.

§ 63.3981 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.

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., repainting or paint stripping), 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).

Extreme performance fluoropolymer coating means coatings that are formulated systems based on fluoropolymer resins which often contain bonding matrix polymers dissolved in non-aqueous solvents as well as other ingredients. Extreme performance fluoropolymer coatings are typically used when one or more critical performance criteria are required including, but not limited to a nonstick low-energy surface, dry film lubrication, high resistance to chemical attack, extremely wide operating temperature, high electrical insulating properties, or that the surface comply with government (e.g., USDA, FDA) or third party specifications for health, safety, reliability, or performance. Once applied to a substrate, extreme performance fluoropolymer coatings undergo a curing process that typically requires high temperatures, a chemical reaction, or other specialized technology.

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 material that meets the definition of coating but does not meet the definition of high performance coating, rubber-to-metal coating, magnet wire coating, or extreme performance fluoropolymer coating as defined in this section.

High performance architectural coating means any coating applied to architectural subsections which is required to meet the specifications of Architectural Aluminum Manufacturer's Association's publication number AAMA 605.2-2000.

High performance coating means any coating that meets the definition of high performance architectural coating or high temperature coating in this section.

High temperature coating means any coating applied to a substrate which during normal use must withstand temperatures of at least 538 degrees Celsius (1000 degrees Fahrenheit).

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.

Magnet wire coatings, commonly referred to as magnet wire enamels, are applied to a continuous strand of wire which will be used to make turns (windings) in electrical devices such as coils, transformers, or motors. Magnet wire coatings provide high dielectric strength and turn-to-turn conductor insulation. This allows the turns of an electrical device to be placed in close proximity to one another which leads to increased coil effectiveness and electrical efficiency.

Magnet wire coating machine means equipment which applies and cures magnet wire coatings.

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 §63.3941. 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.

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 volume of coating solids used for a coating calculated using Equation 2 of §63.3941. 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.

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. Protective oils used on miscellaneous metal parts and products include magnet wire lubricants and soft temporary protective coatings that are removed prior to installation or further assembly of a part or component.

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.

Rubber-to-metal coatings are coatings that contain heat-activated polymer systems in either solvent or water that, when applied to metal substrates, dry to a non-tacky surface and react chemically with the rubber and metal during a vulcanization process.

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.

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).

Volume fraction of coating solids means the ratio of the volume of coating solids (also known as the volume of nonvolatiles) to the volume of a coating in which it is contained; liters (gal) of coating solids per liter (gal) of coating.

Wastewater means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

Table 2 to Subpart M MMM of Part 63—Applicability of General Provisions to Subpart M MMM of Part 63

You must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applicable to subpart M MMM	Explanation
§ 63.1(a)(1)-(14).....	General Applicability.	Yes.....	
§ 63.1(b)(1)-(3).....	Initial Applicability Determination.	Yes.....	Applicability to subpart M MMM is also specified in 63.3881.
§ 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 M MMM
§ 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 § 63.3981.
§ 63.1(a)-(c).....	Units and Abbreviations.	Yes.....	
§ 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 Applicability	Yes.....	
§ 63.6(b)(1)-(7).....	Compliance Dates for New and Reconstructed Sources.	Yes.....	Section 63.3883 specifies the compliance dates.
§ 63.6(c)(1)-(5).....	Compliance Dates for Existing Sources.	Yes.....	Section 63.3883 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.
§ 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 Mmmm 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 §§ 63.3964, 63.3965, and 63.3966.
§ 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 standard. Section 63.3960 specifies the schedule for performance test requirements that are earlier than those specified in § 63.7(a)(2).
§ 63.7(a)(3).....	Performance Tests Required By the Administrator.	Yes.....	
§ 63.7(b)-(e).....	Performance Test Requirements_Notification Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test.	Yes.....	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.

§ 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 standard.
§ 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 standard. Additional requirements for monitoring are specified in § 63.3968.
§ 63.8(a)(4).....	Additional Monitoring Requirements.	No.....	Subpart Mmmm 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

§ 63.8(c)(4).....	CMS.....	No.....	specified in § 63.3968.
			§ 63.3968 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 Mmmm does not have opacity or visible emission standards.
§ 63.8(c)(6).....	CMS Requirements.....	No.....	Section 63.3968 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.....	§ 63.3920 requires reporting of CMS out-of-control periods.
§ 63.8(d)-(e).....	Quality Control Program and CMS Performance Evaluation.	No.....	Subpart Mmmm 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 Mmmm does not require the use of continuous emissions monitoring systems.

§ 63.8(g)(1)-(5).....	Data Reduction.....	No.....	Sections 63.3967 and 63.3968 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			
§ 63.9(f).....	Notification of Visible Emissions/Opacity Test.	No.....	standard. Subpart Mmmm does not have opacity or visible emissions standards.
§ 63.9(g)(1)-(3).....	Additional Notifications When Using CMS.	No.....	subpart Mmmm does not require the use of continuous emissions monitoring systems.
§ 63.9(h).....	Notification of Compliance Status.	Yes.....	Section 63.3910 specifies the dates for submitting the notification of compliance status.
§ 63.9(i).....	Adjustment of Submittal Deadlines.	Yes.....	
§ 63.9(j).....	Change in Previous Information.	Yes.....	
§ 63.10(a).....	Recordkeeping/Reporting Applicability and General Information.	Yes.....	
§ 63.10(b)(1).....	General Recordkeeping Requirements.	Yes.....	Additional requirements are specified in §§ 63.3930 and 63.3931.

§ 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 standard.
§ 63.10(b)(2) (vi)-(xi).....		Yes.....	
§ 63.10(b)(2) (xii).....	Records.....	Yes.....	
§ 63.10(b)(2) (xiii).....		No.....	Subpart Mmmm 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 § 63.3920(a)(7).
§ 63.10(c) (9)-(15).....		Yes.....	
§ 63.10(d)(1).....	General Reporting Requirements.	Yes.....	Additional requirements are specified in § 63.3920.
§ 63.10(d)(2).....	Report of Performance Test Results.	Yes.....	Additional requirements are specified in § 63.3920(b).
§ 63.10(d)(3).....	Reporting Opacity or Visible Emissions Observations.	No.....	Subpart Mmmm does not require opacity or visible emissions observations.
§ 63.10(d)(4).....	Progress Reports for	Yes.....	

§ 63.10(d)(5).....	Sources With Compliance Extensions. Startup, Shutdown, and Malfunction Reports.	Yes.....	Applies only to add-on control devices at sources using these to comply with the standard.
§ 63.10(e) (1)-(2).....	Additional CMS Reports	No.....	Subpart Mmmm does not require the use of continuous emissions monitoring systems.
§ 63.10(e) (3).....	Excess Emissions/CMS Performance Reports.	No.....	Section 63.3920 (b) specifies the contents of periodic compliance reports.
§ 63.10(e) (4).....	COMS Data Reports.....	No.....	Subpart Mmmm does not specify requirements for opacity or COMS.
§ 63.10(f).....	Recordkeeping/ Reporting Waiver.	Yes.....	
§ 63.11.....	Control Device Requirements/Flares.	No.....	Subpart Mmmm 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 MMM 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		Typical organic HAP, percent by mass
	CAS. No.	organic HAP mass fraction	

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 MMMM 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 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.

E.1.4 One Time Deadlines Relating to NESHAP MMMM and NESHAP PPPP

- (a) The Permittee must conduct initial compliance demonstrations, which shall begin on January 3, 2007 and end on January 31, 2008.
- (b) The Permittee must submit a notification of compliance status with the organic HAP emissions limit provision, and must identify compliance option or options (compliant material option, without add-on controls option, or with add-on controls option) used on each coating operation on or before the close of business on March 1, 2008.
- (c) The Permittee must submit semi-annual compliance reports by July 31, 2008, and every January 31 and July 31 thereafter.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: AM General Corporation
Source Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Mailing Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Part 70 Permit No.: T141-6023-00031

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)

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:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: AM General Corporation
Source Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Mailing Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Part 70 Permit No.: T141-6023-00031

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2	
1.	This is an emergency as defined in 326 IAC 2-7-1(12) ☒ The Permittee must notify the Office of Air Management (OAM), 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) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16
2.	This is a deviation, reportable per 326 IAC 2-7-5(3)(c) ☒ The Permittee must submit notice in writing within ten (10) calendar days

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/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
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: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: AM General Corporation
Source Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Mailing Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Part 70 Permit No.: T141-6023-00031

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel

From

To

010

011

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: _____

Date: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: AM General Corporation
Source Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Mailing Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Part 70 Permit No.: T141-6023-00031

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked ANo deviations occurred this reporting period@.

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation
---	-----------------------------	-------------------------------

Form Completed By:	_____
Title/Position:	_____
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: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Part 70: 141-6023-00031
Facility: Vehicle (HUMMER II) production
Parameter: VOC HUMMER II plantwide
Limits: Daily maximum production shall not exceed 364 vehicles.

Month _____ Year _____

TABLE 1

Day	Vehicle Produced This Day	Day	Vehicle Produced This 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: _____

Attached a certification to complete this form

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Quarterly Report

Source Name: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Part 70: 141-6023-00031
Facility: Vehicle (HUMMER II) production
Parameter: VOC
Limits: 86,000 vehicles per 12-consecutive month period, rolled on a monthly basis.

The volatile organic material (VOC) usages, and natural gas usages from the HUMMER II plant shall be limited such that the summation of the VOC emissions from all facilities at this plant shall not exceed 260 tons per 12-month period, rolled on a monthly basis.

QUARTER: _____ **YEAR** _____

TABLE 2

Month	Column 1		Column 2		Column 1 + 2	
	This Month Vehicle Production	This Month VOC Emissions in Tons	Previous 11 Months Vehicle Production	Previous 11 Months VOC Emissions in Tons	12 Month Total Vehicle Production	12 Month Total VOC Emissions in Tons
1						
2						
3						

Note: This Report shall be submitted with a detailed VOC emissions calculations (spreadsheet) showing all the VOC usages and natural gas usages.

Submitted by: _____ Signature: _____
Title/Position: _____ Date: _____

Attached a certification to complete this form

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: AM General Corporation
Source Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Mailing Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Part 70 Permit No.: T141-6023-00031
Facility: Existing Major Source (booths 001-007, boilers 010-011, insignificant degreasers)
Parameter: VOC emission
Limit: 377 tons per twelve consecutive month period.
Quarter: _____ Year: _____

	column 1	column 2	col 3 = col 1+2	column 4	col 5
Month	VOC emissions from Spray Booths 001-007 This Month (tons/	VOC emission from Boilers and Degreasers This Month (tons)	VOC Emissions from Spray Booths 001-007, Boilers and Degreasers This Month (tons)	VOC emissions from previous 11 Months from Spray Booths 001-007, Boilers and Degreasers (tons)	VOC emissions 12 Month Total from Spray Booths 001-007, Boilers and Degreasers (tons)
1					
2					
3					

No deviation occurred in this month.

Deviation/s occurred in this month.
Deviation has been reported on:

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

Attach a signed certification to complete this report

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Monthly Report

Source Name: AM General Corporation
Source Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Mailing Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Part 70 Permit No.: T141-6023-00031
Facility: booth 009
Parameter: VOC emissions
Limit: 24 tons per twelve consecutive month period.

Quarter: _____ Year: _____

	column 1	column 1	column 2
Month	VOC emissions this Month (tons)	VOC emissions from Previous 11 Months (tons)	VOC emissions 12 MonthsTotal (tons)
1			
2			
3			

No deviation occurred in this month.

Deviation/s occurred in this month.
Deviation has been reported on:

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

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: AM General Corporation
Source Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Mailing Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Part 70 Permit No.: T141-6023-00031
Facility: booth 008
Parameter: VOC emissions
Limit: 3.25 tons per month

QUARTER: _____ YEAR _____

Month	VOC Emissions (tons)
1	
2	
3	

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

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: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Part 70 : 141-6023-00031
Facility: Vehicle (HUMMER II) production
Parameter: VOC
Limits: The VOC limits shall be based on a daily-volume- weighted average of the coatings used, and actual transfer efficiencies.

Facility/Operation	VOC Limit (lb of VOC/gallon applied solids (lb/gacs))
ELPO/E-Coat Process and Drying Oven	0.04
Primer/Topcoat System	4.5

Month _____ Year _____

Day	E-Coat/ELPO Coat Process and Drying Oven VOC Emissions (lb/gacs)	Primer /Topcoat (lb/gacs)	Day	E-Coat/ELPO Coat Process and Drying Oven VOC Emissions (lb/gacs)	Primer /Topcoat (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: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Part 70: 141-6023-00031
Facility: Vehicle (HUMMER II) production
Parameter: VOC
Limits: The VOC input usage from the Spot and Final Repair operation shall be limited to less than 15 pounds per day (lbs/day). This limit shall be based on daily-volume- weighted average.

Month		Year	
Day	VOC Input Usage (lb/day)	Day	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**

Part 70 Source Modification Quarterly Report

Source Name: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Part 70: 141-6023-00031
Facility: Zinc Rich Primer Dip Coating Booth
Parameter: Volatile Organic Compounds
Limit: The total VOC input usage to Zinc Rich Primer Dip Coating Booth shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit by the Zinc Rich Primer Dip Coating Booth shall make 326 IAC 2-7-10.5(f), Significant Source Modification not applicable.

QUARTER _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

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 Source Modification Quarterly Report

Source Name: AM General Corporation
Source Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address: 13200 McKinley Highway, Mishawaka, Indiana 46545
Part 70: 141-6023-00031
Facility: Zinc Rich Primer Dip Coating Booth
Parameter: Single HAPs
Limit: The total single HAP input usage to Zinc Rich Primer Dip Coating Booth shall be limited to less than 10 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER _____ YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
1			
2			
3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
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 for a PSD, Significant Source Modification, and a Significant Permit
Modification to a Part 70 Source

Source Name: **AM General LLC**
Source Address: **13200 McKinley Highway, Mishawaka, Indiana 46545**
County: **St. Joseph**
SIC Code: **3711**
Operation Permit No.: **T141-6023-00031**
Operation Permit Issuance Date: **February 25, 1999**
Significant Source Modification No.: **141-23096-00031**
PSD/Significant Source Modification No.: **141-22343-00031**
Significant Permit Modification No.: **141-22830-00031**
Permit Reviewer: **Aida De Guzman**

On January 20, 2007, the Office of Air Quality (OAQ) had a notice published in the South Bend Tribune, South Bend, Indiana, stating AM General LLC had applied for a PSD, relating to the change in the Primer and Topcoat PSD BACT; significant source modification, involving construction and operation of a new service paint booth, a metal parts blasting room; and significant permit modification, to incorporate both PSD and source modifications to the Part 70 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 these permits should be issued as proposed.

On February 21, 2007, AM General LLC, submitted the following comments to the proposed PSD, significant source modification and significant permit modification (additions are **bolded** and deletions are ~~struck through~~ for emphasis):

Comment 1: A.2(d)(4)(E), refers to four Final Repair stations - In the course of obtaining previous modifications to Part 70 Permit 141-6023-00031, we made the OAQ aware that three, rather than four repair booths were constructed. Please reduce the number of repair stations to three.

Response 1: Section A.2(d)(4)(E), of the proposed SSM 141-23096-00031, PSD 141-22343-00031, and SPM 141-22830-00031 and SECTION D.5 of the proposed PSD 141-22343-00031 and SPM 141-22830-00031 have been revised to reflect the correct number of final repair stations as follows:

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:

(d) HUMMER II vehicle production plant:

(4) Painting Operations:

(E) Final and Spot Repair (Category #8) - This includes, off-line spot and ~~four (4)~~ **three (3)** final repair stations, identified as No.1, No.2, **and** No.3, ~~and No.44~~. The PM overspray from this system will be controlled by dry filters.

SECTION D.5 GENERAL CONSTRUCTION CONDITIONS

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

(e d) HUMMER II vehicle production plant:

(4) Painting Operations:

(E) Final and Spot Repair (Category #8) - This includes, off-line spot and ~~four~~ **three (3)** final repair stations, identified as No.1, No.2, **and** No.3, ~~and No.44~~. The PM overspray from this system will be controlled by dry filters.

D.5.2 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volume weighted average volatile organic compound (VOC) content of coating applied to the metal part of the HUMMER II from facilities listed in items (c)(4)(A), (c)(4)(B), (c)(4)(C), and (c)(4)(H) shall be limited as follows:

Type of Coating	VOC Emissions Limit (pounds per gallon of coatings less water)
Clear Coatings	4.3
Forced Warm Air Dried Coatings	3.5
Air Dried Coatings	3.5
Extreme Performance Coatings	3.5
All Other Coating	3.0

(b) The VOC input usage from the off-line Spot and ~~four (4)~~ **three (3)** Final Repair Stations, identified as No. 1, No. 2, **and** No. 3 ~~and No. 4~~ (Category #8) shall be limited to a total of less than 15 pounds per day (lbs/day). Compliance with this limit shall make 326 IAC 8-2-9 (Miscellaneous Metal Coating) not applicable. This limit shall also satisfy the PSD BACT limit.

Comment 2: D.1.9 - We accept this language with respect to daily demonstrations of compliance (using the "Daily Volume Weighted Average"), although we believe that a change should be made in 326 IAC Article 8, Rule 1 which would reduce the demonstration of compliance for spray painting from daily to monthly. This would benefit the regulated community by reducing paperwork while causing no environmental harm, as there would be no difference in emissions of VOC.

Response 2: IDEM cannot require monthly demonstration because 326 IAC 8-1-2(7) specifically requires a daily demonstration of compliance with the VOC limits required by 326 IAC 8-2 for coating lines. Until rule 326 IAC 8-1-2 is modified, compliance with 326 IAC 8-2 VOC limits shall be demonstrated on a daily basis. No changes have been made to the permit as a result of this comment.

Comment 3: D.1.10 [This condition requires PM stack testing of the emissions from the Metal Parts

Blasting Room)] - AM General agreed to perform a stack test as part of the permitting process for this unit. Emissions are less than 10 tpy. There is no justification for any additional testing, much less for repeat testing every 5 years. This is especially true in light of the monitoring requirements of Conditions D.1.11 and D.1.13. In addition, IDEM's "Title V Air Permit Compliance Monitoring Guidance," dated May 14, 1996 ("Monitoring Guidance"), reflects a desire that compliance monitoring conditions would be "unit-specific and realistic" and noted that "less stringent requirements are being proposed for smaller units." (p.6) Further, IDEM recognizes that the cost of testing an emission unit which potentially has a low emission rate and is properly designed and maintained is hard to justify. Therefore, with the exception of those facilities listed in Table A below [not relevant here], periodic emission testing will be required only for units that have applicable requirements and that in any of the last five years have had actual emissions in excess of 100 tons per year.

Response 3: The proposed Metal Parts Blasting Room has potential PM and PM10 emissions that are significantly higher than the PSD applicability thresholds. It is the cartridge filter that controls these pollutants below the PSD significant levels of 25 tons of PM per year and 15 tons of PM10 per year. The Metal Parts Blasting Room does require the cartridge filter to avoid being subject to PSD review. Stack testing was required in the permit to demonstrate that the PM and PM10 emission rates from the Metal Parts Blasting Room are indeed below the PSD significant levels. In order to ensure that this status as a minor PSD modification is maintained, periodic stack testing was required, and repeat testing every 5 years was determined to be reasonable.

Comment 4: D.5.1(c) "Daily Volume Weighted Average"] - Please see our comments regarding Condition D.1.9.

Response 4: The PSD limits in Condition D.5.1(c) requires daily volume weighted average demonstration of the coatings applied. This was determined based on the most recent stringent BACT established for the automobile and light duty-truck assembly plant. Changing the averaging time from daily to monthly would not satisfy the requirements of BACT (326 IAC 2-2-3). Therefore, no changes have been made to Condition D.5.1.

Comment 5: D.5.7 [H2 VOC capture, RTO VOC destruct and particulate testing requirements] - Please see our comments to Condition D.1.10. In addition, compliance tests have been performed on the RTO, and an operating temperature which will achieve DE has been determined. The testing in subsection (a) and the repeat testing in subsection (b) are unnecessary and arbitrary and capricious. No applicable requirement which allows use of an RTO to achieve compliance requires repeat testing. (See, e. g. the miscellaneous metal MACT which requires only one-time testing and also permits use of the results of previously conducted testing if it meets protocol (40 CFR § 63.3960(c)). If one-time testing and subsequent temperature monitoring are deemed adequate to assure continuous compliance with the MACT standard, such is also adequate to determine compliance with other applicable requirements and repeating testing cannot be justified (nor did the TSD even attempt to justify it). Finally, subsection (c) is also an unjustifiable imposition of repeat testing for PM. Testing conducted in September of 2002 demonstrated that the H2 plant is a minor source of particulate emissions. The following is a testing condition as it's stated in the current air permit (Title V 6008, 2nd Significant Permit Modification No. 16052):

D.5.14 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (c) The compliance stack tests shall perform on the Primer Surfacers/Guidecoat, and Topcoat, operations for PM and PM-10 utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10,

or other methods as approved by the Commissioner. The PM and PM10 testing is required to demonstrate that the source is not major for either pollutant, under 326 IAC 2-2, Prevention of Significant Deterioration. PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Response 5: The emission units in D.5.7 are subject to PSD review, and PSD BACT limits were established and required in the permit. To demonstrate compliance with these limits, stack testing is required, which establishes the control's operating parameters that will be monitored until the next compliance stack testing.

The rationale of the repeat testing was based from the EPA Part 70 regulations (40 CFR § 70.6(a)(3)(i)(B) and § 70.6(c)(1) which require that all Title V permits include monitoring to assure compliance with the terms of the permit. This should include any monitoring delineated in the applicable requirement, and other additional "gap filling" monitoring in cases where the underlying regulation has no periodic monitoring or the monitoring required consists of only one-time monitoring occurrence (e.g, one stack test over the life of the unit). Therefore, no changes have been made to the VOC testing requirement.

The requirement for PM and PM10 testing every 2.5 years was removed in significant permit modification (SPM No. 141-16052-00031, issued on August 25, 2003). Therefore, Condition D.5.7 has been changed to reflect the condition in SPM No. 141-16052-00031.

D.5.7 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11] [326 IAC 2-2]

- (a) Compliance stack tests shall be performed on the Regenerative Thermal Oxidizer (RTO) to determine the operating temperature that will achieve the following destruction efficiency and to determine the capture system efficiency for the coating systems to verify compliance with the VOC limits in Conditions D.5.1 and D.5.2:

Facility	Destruction Efficiency
E-Coat/ELPO	95%
Primer/Topcoat System	95%

- (b) The Compliance stack tests for the Primer/Topcoat System in (a) of this condition shall be made utilizing Method 25 for destruction efficiency, and or other methods as approved by the Commissioner for capture efficiency. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (c) The compliance stack tests shall be performed on the Primer/Topcoat, for PM and PM-10 utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner. The PM and PM10 testing is required to demonstrate that the source is not major for either pollutant, under 326 IAC 2-2, Prevention of Significant Deterioration. ~~This test shall be repeated at least once every two and half (2.5) years from the date of this valid compliance demonstration.~~ PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

The compliance tests required in (a) **and** (b) ~~and (c)~~ of this condition shall be ~~made~~ **conducted**

within 60 days, after the issuance of Significant Permit Modification 141-22830-00031.

Comment 6: D.5.13(a) - [compliance monitoring, daily observation of stacks at the H2 plant] - Some stacks listed here (S13, 14, 15, 26, 27 & 29) are H1 stacks and are already listed in Section D.1; these stacks should be removed from condition D.5.13(a). We are not aware of stacks numbered S30, 33, 36, 37, 38, 39 & 40. We request that this reference to stacks 30, 33 and 36 through 40 be removed, and that the stacks to be observed for overspray (particulate) emissions be specifically named. The stacks that should be listed in this condition are: primer, basecoat and clearcoat manual zones and in-line ("spot") repair exhausts.

Response 6: Condition D.5.13 in SPM 141-22830-00031 and PSD 141-22343-00031 has been modified as follows:

D.5.13 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters, and to verify the proper flow of water through the water pan of the water wash systems, proper placement and configuration of baffle panels, and other factors that affect water pan capture efficiency (e.g., debris in the water pans). To monitor the performance of the dry filters, and water wash weekly observations shall be made of the overspray from the ~~surface coating~~ **primer and topcoat (basecoat and clearcoat manual zones) and in-line ("spot") repair booths stacks (S13, S14, S15, S26, S27, S29, S30, S33, S36, S37, S38, S39, S40) (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.**

Comment 7: E.1.4(a) and (c) [One Time Deadlines Relating to NESHAP MMMM and NESHAP PPPP] AM General will comply with 40 CFR 63, Subpart MMMM using the "Compliance Without Add-On Controls" option. No such testing, evaluation nor demonstrations are required on January 2, 2007. In addition, AM General is not subject to 40 CFR 63, Subpart PPPP (NESHAP for surface coating of plastics), as surface coating of metal is the "predominant activity."

Response 7: Since the Permittee selected to comply with NESHAP MMMM "without add-on control", Condition E.1.4, which referred to the requirements of an "add-on control" has been deleted.

AM General LLC is subject to NESHAP PPPP, and compliance with Subpart PPPP will be demonstrated through compliance with NESHAP MMMM. Therefore, the references to NESHAP PPPP in Condition E.1 title will remain.

E.1.4 One Time Deadlines Relating to NESHAP MMMM and NESHAP PPPP

- (a) The Permittee must conduct ~~the performance tests, performance evaluations, design evaluations, capture efficiency testing, and other~~ initial compliance demonstrations, **which shall begin on January 3, 2007 and end on by January 2, 2007. January 31, 2008.**
- (b) The Permittee must submit a notification of compliance status with the organic HAP emissions limit provision, and must identify compliance option or options (compliant material option, without add-on controls option, or with add-on controls option) used on each coating operation on or before the close of business on March 1, 2008.
- (c) The Permittee must submit ~~results of initial performance tests no later than March 3, 2007, and~~ semi-annual compliance reports by July 31, 2008, and every January 31 and

July 31 thereafter.

Upon further review, IDEM, OAQ has made the following changes to the Part 70 permit:

- (1) The following emission units have been added in SECTION E.1, since they were inadvertently excluded:

SECTION E.1

(E) Final and Spot Repair (Category #8) - This includes, off-line spot and three (3) final repair stations, identified as No.1, No.2, and No.3. The PM overspray from this system will be controlled by dry filters.

- (2) It has determined that it is not necessary to list the name and title of the Responsible Official in the permit. Therefore, SECTION A.1 has been modified as follows:

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

The Permittee owns and operates a stationary plant for the production of HUMMERs for military and commercial use.

~~Responsible Official: Rick Smith Vice President~~
Source Address: 13200 McKinley Hwy., Mishawaka, IN 46545
Mailing Address: 13200 McKinley Hwy., Mishawaka, IN 46545
SIC Code: 3711
County Location: St. Joseph
County Status: Nonattainment for 8-hour ozone
Attainment for all other criteria pollutants
Source Status: Major Source, under Emission Offset Rules
Minor Source, under PSD Rules
Major Source, Part 70 Permit Program
Major Source, Section 112 of the Clean Air Act

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70 PSD/Significant Source
Modification**

Source Description and Location
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Source Name:	AM General LLC
Source Location:	13200 McKinley Highway, Mishawaka, Indiana 46545
County:	St. Joseph
SIC Code:	3711
Operation Permit No.:	T141-6023-00031
Operation Permit Issuance Date:	February 25, 1999
PSD/Significant Source Modification No.:	141-22343-00031
Permit Reviewer:	Aida De Guzman

Existing Approvals

The source was issued a Part 70 Operating Permit No. 141-6023-00031 on February 25, 1999. The source has since received the following approvals:

- (a) First Administrative Amendment No.: 141-12041-00031, issued on April 20, 2000;
- (b) Second Administrative Amendment No.: 141-12212-00031, issued on August 22, 2000;
- (c) Third Administrative Amendment No.: 141-12413-00031, issued on August 4, 2000;
- (d) Fourth Administrative Amendment No.: 141-14597-00031, issued on July 31, 2001;
- (e) First Reopening No.: 141-13466-00031, issued on November 1, 2001;
- (f) First Significant Permit Modification No.: 141-15219-00031, issued on May 8, 2002;
- (g) First Minor Permit Modification No.: 141-15726-00031, issued on July 31, 2002;
- (h) Fifth Administrative Amendment No.: 141-16221-00031, issued on August 20, 2002;
- (i) Second Minor Permit Modification No.: 141-17181-00031, issued April 3, 2003;
- (j) Third Minor Permit Modification No.: 141-17407-00031, issued on July 9, 2003; and
- (k) Second Significant Permit Modification No.: 141-16052-00031, issued on August 25, 2003.

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Nonattainment
CO	Attainment
Lead	Not determined

- (a) Volatile organic compounds (VOC) and nitrogen oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. St. Joseph County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) St. Joseph County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions.
- (c) 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.

Source Status

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

Pollutant	Emissions (tons/year)
PM	82.67
PM10	56.77
SO ₂	0.5
VOC	765.59
CO	64.42
NO _x	37.8

- (a) This existing source is a major stationary source under Emission Offset (326 IAC 2-3) because VOC, a nonattainment regulated pollutant, is emitted at a rate of 100 tons per year or more.

- (b) The existing source is a major stationary source under 326 IAC 2-2, Prevention of Significant Deterioration because it went through PSD review.

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

HAPs	Potential To Emit (tons/year)
Single HAP	>10
Combined HAPs	508.55

This existing source is a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are greater than ten (10) tons per year for single HAP or twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Actual Emissions

The following table shows the actual emissions from the source for calendar year 2004. This information was submitted by the source on June 19, 2006.

Pollutant	Actual Emissions (tons/year)
PM	50.0
PM10	50.0
SO ₂	3.0
VOC	266.0
CO	1.68
NO _x	1.55
Lead	0.0

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by AM General LLC on December 5, 2005 relating to the re-opening of the PSD BACT determined for the Primer and Topcoat operations.

HUMMER II vehicle production plant:

- (a) A request for a re-evaluation of the BACT limitation for the primer and topcoat coating operations, located at the HUMMER II (H-2) vehicle production plant. The source is requesting a combined limitation for the following reasons:
- (1) A combined limit better reflects the configuration of the coating operation. The primer and topcoat operations share a common flash-off area which results in one common coating system; and
 - (2) Demonstration of compliance with individual limits for the primer and topcoat operations is complicated by the common flash-off area.

This request for a combined limit does not involve a physical change or change in the method of operation of the combined coating system. AM General LLC is not proposing a change to the permitted production limit of 86,000 vehicles per 12 consecutive month period, rolled on a monthly basis or the daily maximum production rate of 364 vehicles. AM General LLC is also not requesting an increase in the VOC limitation of 260 tons/year for all facilities combined at the H2 plant. AM General LLC operates a vehicle assembly plant located in Mishawaka, Indiana. The plant is designed to produce the Hummer (H2) sports utility vehicle, which includes a surface coating line that involves applying a primer and topcoat material to the H2 vehicle. As stated in the plant's operating permit, the initial limits established for the plant's surface coating facilities/operations are as follows:

Facilities / Operations VOC Limit*	Pounds of VOC/Gallon Applied Coating Solids*
Primer System	2.9
Topcoat System	5.3

* As stated in operating condition D.5.5 (c) "PSD BACT Limit [326 IAC 2-2]"

AM General LLC has determined during performance testing of the primer and topcoat coating operations that the VOC capture efficiency as initially anticipated as part of the PSD air permitting process is not achievable. This is essentially due to the following reasons:

- (a) Information used in support of the initial PSD permit was based on engineering estimates since this was to be the first type of non-military vehicle with this configuration to be coated and assembled in the United States.
- (b) Because of the lack of available space within the plant, the initial design of having a flash off area after the spray zone prior to oven curing for the primer operation and the topcoat operation had to be altered. This alteration resulted in a common flash off area being shared by the primer and topcoat operations. Subsequently, the primer and topcoat operations lost their independent design and a combined system was established.

Enforcement Issues

IDEM is aware that during stack tests of the VOC controls for the Primer and Topcoat systems these operations did not meet each individual PSD BACT limit. IDEM is reviewing this matter and will take the appropriate action.

Emission Calculations

The PTE remains unchanged as a result of this PSD/Significant Source Modification.

Permit Level Determination – Part 70 and PSD

The re-opening of the PSD BACT for the Primer System and the Topcoat System permitted in Part 70 PSD/Significant Source Modification No.: 141-11673-00031, issued on June 28, 2000, is subject to PSD review under 326 IAC 2-2. Therefore, it is subject to 326 IAC 2-2 and 326 IAC 2-7-10.5(f), significant source modification.

Federal Rule Applicability Determination

- (a) National Emissions Standards for Hazardous Air Pollutants (NESHAP):

The PSD BACT re-opening will not affect the NESHAP already determined for the Primer and Topcoat operations.

- (b) New Source Performance Standards (NSPS):

The PSD BACT re-opening will not affect the NSPS already determined for the Primer and Topcoat operations.

State Rule Applicability Determination

- (a) 326 IAC 2-2 (Prevention of Significant Deterioration)

Due to re-opening of the PSD BACT for the Primer System and the Topcoat System, these emission units will go through PSD review under 326 IAC 2-2.

- (b) 326 IAC 2-2-3 (PSD Rule: Best Available Control Technology (BACT):

The Primer System and the Topcoat System, are subject to this rule. A re-evaluation of the PSD BACT for VOC emissions from the Mishawaka H2 plant's primer and topcoat systems has been made. See Appendix A for the detailed BACT analysis.

- (c) 326 IAC 2-2-4 (PSD Rule: Air Quality Analysis Requirements)

Pursuant to section (a) of this rule "any application for a permit under the provisions of this rule shall contain an analysis of ambient air quality in the area that the major modification would affect for each of the following pollutants:

- (1) For a modification, each regulated NSR pollutant for which the modification would result in a significant emission increase.

The PTE from the Primer/Topcoat remains unchanged and air modeling was done for the RTO stack as required in the original PSD/SSM 141-11673-00031. Therefore, nothing has changed to warrant another air modeling.

- (d) 326 2-2-5 (PSD Rule: Air Quality Impact Requirements)

Section (a) of this rule states that the owner or operator of the proposed major modification shall demonstrate that allowable emissions increases in conjunction with all applicable emissions increases or reductions (including secondary emissions) will not cause or contribute to air pollution in violation of any:

- (1) ambient air quality standard, as designated in 326 IAC 1-3, in any air quality control region; or
- (2) applicable maximum allowable increase over the baseline concentration in any area as described in section 6 of this rule.

Section (e) of this rule states that an 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 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 (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.

This modification only involves re-opening of the PSD BACT and does not result in a nonattainment pollutant incremental consumption that will cause significant degradation of the air quality in the area.

- (e) 326 IAC 2-2-12 (PSD Rule Permit Rescission)
The PSD permit or the source modification permit shall remain in effect unless it is rescinded, modified, revoked or expires.

Changes to the Part 70 Permit

The changes listed below have been made to Part 70 Operating Permit No. 141-6023-00031, issued on February 25, 1999. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

The following SECTION D.5 has been modified to reflect the new PSD BACT for the Primer/Topcoat System, and Boilers #1 and #2 have been moved with the other Boilers in SECTION D.2. Also, the numbering system has been changed for consistency throughout the permit:

SECTION D.5 GENERAL CONSTRUCTION CONDITIONS

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

(3 d) ~~Construction of the new HUMMER II Plant, which consists of the following:~~

~~New~~ HUMMER II vehicle production plant:

- (1) ~~Two (2) natural gas-fired low NO_x boilers (Categories #1 & #2), identified as boiler #1 and boiler #2, each has a heat input capacity of 25 million British Thermal Units per hour (mmBtu/hr);~~
- (2) Miscellaneous natural gas-fired low NO_x process ovens and various heaters, with a total heat input of 109 mmBtu/hr, and low NO_x Thermal Oxidizer with a total heat input of 9.7 mmBtu/hr;
- (3) Body Shop - This is where the first major step of the assembly process will be performed, metal body components of the HUMMER II vehicle (i.e. door, deck lid, hood, roof, and side panels and frame) will be supplied by off-site

contractors. Various types of welding, resistance spot welding, metal grinding/brazing will be performed;

(4) Painting Operations:

- (aA) Electrodeposition dip prime process (**E-Coat/ELPO**) (Category #3)- Pre-clean wash, using a mixture of water and water reducible detergents and phosphate application. These cleaners are applied to the vehicle surface using a combination of spray nozzles and/or dip tanks, to remove oils and grease that may have accumulated on the vehicle parts.

The prime coating system (E-Coat/ELPO), which follows the phosphate cleaning will utilized waterborne coatings made up of a mixture of resins, pigments and water. The coated vehicle will then enter the **E-Coat/ELPO**/~~E-coat~~ drying oven.

The VOC and HAPs emissions from the **Electrodeposition dip prime process (E-Coat/ELPO), and the E-Coat/ELPO drying oven** will be controlled by a Regenerative Thermal Oxidizer.

- (bB) Primer ~~Surfacer/~~Guidecoat (Category #4) - Body sealers and/or fillers, prep operation which involves scuff sanding and manual wiping using solvent and tack cloths to remove particles, then to antichip booth, then to primer ~~surfacer~~-booth where the exterior will be painted and primer ~~surfacer~~ drying oven. The coating will be manually applied or will use automatic spray systems.

The VOC and HAPs emissions from the Primer automatic zones and from the curing oven will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a water wash.

- (cC) Topcoat System (Category #5) - This system will consists of a preparation area, which involves minor scuffing and manual wiping using solvent and tack cloths to remove particles and/or otherwise prepare the surface for painting, basecoat spray booth, clearcoat spray booth, flash-off area and natural gas-fired drying oven, repair/polish. The coating will be applied to the vehicle parts using various types of spray applicators.

The VOC and HAPs emissions from the basecoat/clearcoat automatic spray application zones and from the curing oven of the topcoat system will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a water wash.

- (dD) Vehicle Fluid Filling (Category #7) - Where gasoline, diesel, antifreeze, transmission fluid, windshield washer fluid, power steering fluid, brake fluid, engine oil, will be filled into the vehicles.

- (eE) Final and Spot Repair (Category #8) - This includes, off-line spot and four (4) final repair stations, identified as No.1, No.2, No.3, and No.4. The PM overspray from this system will be controlled by dry filters.

- (fF) Assembly Final Line (Category #9) - After the paint shop, the painted vehicle components are routed to general assembly. General assembly

consists of interior and exterior trim components and glass installation, chassis, wheel/tires, powertrain and final line assembly operations. The Vehicle start-up and roll test verifies if powertrain is installed correctly.

- (gG) Miscellaneous Solvent Purge Usage and Cleanup (Category #10)- Solvents will be used in the body shop, paint shop, oven cleaning, general assembly areas and routine housekeeping. In the paint shop the purge material is reclaimed internally or externally to the spray application equipment.
- (hH) Miscellaneous Sealers and Adhesives (Category #11) – Various sealers and adhesives will be used throughout the assembly process. Majority of these sealers and adhesives will be used in the paint shop. A special sealant will be used in the vehicle glass installation. These materials will be either air-dried or oven cured.
- (iI) Bulk Storage Tanks (Category #12) - Submerged fill pipes, and conservation vents on these tanks to further minimize VOC and HAPs emissions. Stage I vapor controls will also be installed where appropriate.

Tank ID	Storage Capacity (gallons)	Location	Material Stored
101	10,000	New Bulk Tank Farm	Purge Solvent
102	10,000	New Bulk Tank Farm	Unleaded Gasoline
103	8,000	New Bulk Tank Farm	Antifreeze (Ethylene Glycol)
104	3,000	New Bulk Tank Farm	Window Washer
105	3,000	New Bulk Tank Farm	Transmission Fluid
106	3,000	New Bulk Tank Farm	Power Steering Fluid
107	10,000	New Bulk Tank Farm	Waste Solvent

- (i) One (1) purge solvent vertical fixed roof above ground storage tank, ID 101, with a capacity of 10,000 gallons.
- (ii) One (1) unleaded gasoline vertical fixed roof above ground storage tank, ID 102, with a capacity of 10,000 gallons.
- (iii) One (1) antifreeze (ethylene glycol) vertical fixed roof above ground storage tank, ID 103, with a capacity of 8,000 gallons.
- (iv) One (1) window washer vertical fixed roof above ground storage tank, ID 104, with a capacity of 3,000 gallons.
- (v) One (1) transmission fluid vertical fixed roof above ground storage tank, ID 105, with a capacity of 3,000 gallons.
- (vi) One (1) power steering fluid vertical fixed roof above ground storage tank, ID 106, with a capacity of 3,000 gallons.
- (vii) One (1) waste solvent vertical fixed roof above ground storage tank, ID 107, with a capacity of 10,000 gallons.

1	Miscellaneous natural gas-fired process ovens, heaters and control equipment (RTO)	Low NOx Burners
2	Two Boilers	Low NOx Burners
3	— Electrodeposition dip prime; E-Coat process (ELPO) — E-Coat Oven	Regenerative Thermal Oxidizer (RTO)
4	— Primer Surfacer/Guidecoat Spray System — Primer Surfacer/Guidecoat Drying Oven	Regenerative Thermal Oxidizer for VOC and HAP control (paint automatic applicator sections only). Water wash for PM overspray.
-5	— Topcoat Spray System — Topcoat Drying Oven	Regenerative Thermal Oxidizer (paint automatic applicator sections only). Water wash for PM overspray.
-12	Bulk Storage Tanks	Submerged fill pipes, conservation vents, and Stage I vapor controls.

SECTION D.5.3 GENERAL CONSTRUCTION CONDITIONS

Construction Conditions D.5.1 through D.5.4 have been deleted because they are no longer applicable:

D.5.1 Permit No Defense [IC 13]

~~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.~~

D.5.2 Definitions [326 IAC 2-7-1]

~~Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.~~

D.5.3 Effective Date of the Permit [40CFR 124]

~~Pursuant to 40 CFR 124.15, 40 CFR 124.19, and 40 CFR 124.20, this permit is effective upon issuance.~~

D.5.4 Expiration 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 suspended for a continuous period of eighteen (18) months or more.~~

OPERATION CONDITIONS

Emission Limitations and Standards

On March 3, 2003, U.S.EPA published a notice for AConditional Approval of Implementation Plan: Indiana in the Federal Register / Vol. 68, No.41 at pages 9892 through 9895. This notice grants conditional approval to the PSD State Implementation Plan (SIP) under provisions of 40 CFR '51.166 and 40 CFR '52.770 while superceding the delegated PSD SIP authority under 40 CFR '52.793. The effective date for these provisions is April 2, 2003. Therefore, the PSD permits will be issued under the authority of 326 IAC 2-2 and will no longer be issued under the provision of 40 CFR 52.21 and 40 CFR 124. The following permit conditions have been revised based on the PSD SIP approval status.

IDEM has deleted the referenced to 326 IAC 2-4.1-1 (New Source Toxics Control), because detailed requirements of the NESHAP, MMMM have been included in the permit.

Although the destruction efficiency of 95% is mentioned in Condition D.5.7 Testing Requirements, IDEM has included condition (d) for the RTO destruction efficiency in Condition D.5.1.

The second paragraph ("During the first twelve (12) months.....") of Condition D.5.5(a) and (b), now D.5.1(a) and (b) has been deleted because the source has now operated more than 12 months.

D.5.5 5.1 PSD BACT Limit [326 IAC 2-2] ~~[40 CFR 52.21]~~

Pursuant to the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and ~~40 CFR Part 52.21~~, the HUMMER II plant shall be limited as follows:

- (a) The HUMMER II plant production rate shall be limited to 86,000 vehicles per 12-consecutive month period, rolled on a monthly basis. Daily maximum production shall not exceed 364 vehicles.

~~During the first twelve (12) months of operation, the vehicle shall be limited such that the total vehicle produced divided by the accumulated months of operation shall not exceed 86,000 vehicles per year divided by twelve (12) months, which equals an average of 7,166 vehicles per month, rolled on a monthly basis.~~

- (b) The volatile organic material (VOC) usages, and natural gas usages from the HUMMER II plant shall be limited such that the summation of the VOC emissions from all facilities at this plant shall not exceed 260 tons per 12-month period, rolled on a monthly basis.

~~During the first twelve (12) months of operation, the volatile organic material (VOC) usages, and natural gas usages shall be limited such that the summation of the VOC emissions from all facilities at this HUMMER II plant divided by the accumulated months of operation shall not exceed 260 tons per year divided by twelve (12) months, which equals an average of 21.7 tons per month, rolled on a monthly basis.~~

- (b) The limitations for the following HUMMER II surface coating facilities shall be as follows:

Facilities/Operations	Controlled VOC Limit (Pounds of VOC/Gallon Applied Coating Solids)
E-Coat/ELPO /E-Coat System	0.04
Primer Surfacers/Guidecoat System /Topcoat System	2.9-4.5
Topcoat System	5.3

The VOC limit in pounds of VOC/gallon applied coating solids shall be determined on a daily-volume-weighted average and actual transfer efficiencies.

- (d) **The Regenerative Thermal Oxidizer (RTO) used to control VOC emissions from the E-Coat/ELPO and Primer/Topcoat paint systems shall achieve a minimum VOC destruction efficiency of 95%.**

- (d e) Good Work Practices To Reduce VOC Emissions:

- (1) Conservation vents, submerged fill pipes and Stage I Vapor Recovery System where appropriate shall be installed for the gasoline storage tanks.
- (2) ~~High efficiency spray applicators shall be utilized for all the surface coating facilities.~~

The use of robotic paint application system to minimize paint usage.

- (3) Capturing of paint lines **cleaning** solvent for recycling.
- (4) Capturing of solvent purged from paint lines for off-site recycling and/or other processing.
- (5) The use of masking material to protect certain equipment, walls, and floors around the booths from overspray, thus reducing the cleaning solvent usage.
- (6) The use of water-based coatings when feasible.
- (7) Water blasting of vehicle carriers.
- (8) The use of closed containers to store or dispose of cloth, paper, or other materials impregnated with VOC.
- (9) The use of Stage 2 Recovery System in the fluid filling operation.
- (10) Minimizing spills in the vehicle fluid filling operation. ~~and~~

- (11) Closing the receiving vessel after it has been filled with the fluid.
- (12) **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.**
- (13) **Minimization of major paint repair.**

Compliance with sections (a) through (d-e) of this PSD BACT condition and condition D.6.3 of this permit shall satisfy 326 IAC 2-2, the Prevention of Significant Deterioration **Requirements** and also satisfy 326 IAC 2-4.1-1 (New Source Toxic Control) and 326 IAC 8-1-6 (General VOC Reduction Requirements).

D.5.6-5.2 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volume weighted average volatile organic compound (VOC) content of coating applied to the metal part of the HUMMER II from facilities listed in items (b)(4)(a), (b)(4)(b), (b)(4)(c) and (b)(4)(i) **(c)(4)(A), (c)(4)(B), (c)(4)(C), and (c)(4)(H)** shall be limited as follows:

Type of Coating	VOC Emissions Limit (pounds per gallon of coatings less water)
Clear Coatings	4.3
Forced Warm Air Dried Coatings	3.5
Air Dried Coatings	3.5
Extreme Performance Coatings	3.5
All Other Coating	3.0

The following Section (b) has been moved to Condition D.5.8:

- ~~(b) The VOC limit in this condition shall be determined on a daily volume weighted average, using the following equation:~~

~~$$\text{Lb VOC} = \frac{\text{coatings [D * O * Q]} / [1 - w * Dc/Dw]}{\text{Gallon less water}}$$~~

~~$$\text{Gallon less water} = \frac{C}{\text{Where:}}$$~~

~~Where:~~

~~Dc = density of coating, lb/gal~~

~~Dw = density of water, 8.33 lb/gal~~

~~O = weight percent organics, %~~

~~W = percent volume water, %~~

~~Q = quantity of coating, gal/unit~~

~~C = total coatings used, gal/unit~~

- (eb) The VOC input usage from the off-line Spot and four (4) Final Repair Stations, identified as No. 1, No. 2, No. 3 and No. 4 (Category #8) shall be limited to a total of less than 15 pounds per day (lbs/day). Compliance with this limit shall make 326 IAC 8-2-9 (Miscellaneous Metal Coating) not applicable. ~~This limit shall be based on a daily volume weighted average.~~ This limit shall also satisfy the PSD BACT limit.
- (ec) Solvent sprayed from application equipment during cleanup or color changes shall be directed into appropriately designed reclaim equipment. Such equipment shall be designed to effectively capture purge solvent and minimize evaporation. The waste solvent shall be disposed of in such a manner that evaporation is minimized.

Condition D.5.7, now D.5.3, has been changed since the Permittee will not be using an equivalent emission limitation in pounds per gallon of solids to demonstrate compliance with the VOC limits in Condition D.5.2.

D.5.7 5.3 Volatile Organic Compounds [326 IAC 8-1-2(a)]

Pursuant to 326 IAC 8-1-2(a), the **Primer/Topcoat System and the Primer Surfacers/Guidecoat System** combined VOC emission limitations specified under 326 IAC 8-2-9 in Condition D.5.2 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.**

~~Pursuant to 326 IAC 8-1-2(a), the VOC emission limitations specified under 326 IAC 8-2-9, shall be achieved through one (1) or any combination of the following:~~

- (a) ~~Thermal or catalytic incineration;~~
- (b) ~~Equivalent emissions limitations based on actual transfer efficiency higher than specified baseline transfer efficiency on 60% baseline transfer efficiency shall be as follows:~~

Miscellaneous Metal Coating	Equivalent Emission Limit	
	kg/liter Solids Deposited	Lbs/gal Solids Deposited
Clear Coatings	2.08	17.3
Air Dried up to 90°C	1.34	11.2
Extreme Performance Coatings	1.34	11.2
All Other Coatings and Coating Systems	1.01	8.4

~~Compliance with the equivalent emissions limits in this condition shall be determined according to the following equation:~~

$$E = \frac{L}{[(1 - (L/D)) * (T)]}$$

Where: E = Equivalent emission limit in pounds of VOC per gallon coating solid deposited.

L = Actual VOC content in coating in pounds per gallon of coating, as applied.

D = Actual density of VOC in coating in pounds per gallon of VOC.

T = Actual measured transfer efficiency.

Condition D.5.8 has been changed to Condition D.5.4 to reflect the new requirements under 326 IAC 6-3-2.

D.5.8 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM overspray emissions from the Surfacers/Guidecoat and Topcoat System, Spot and Final Repair operations shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour;}$$

and
 P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour;}$$

and
 P = process weight rate in tons per hour

D.5.4 Particulate Emission Limitation, Work Practices and Control Technologies [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), the particulate overspray emissions from the Primer/Topcoat System, Spot and Final Repair operations shall be controlled by water wash and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

Condition D.5.9 has been deleted from this section because boilers #1 and #2 have been moved to SECTION D.2. Sections (b) and (c) of this condition have been included in SECTION D.2, Condition D.2.5 Record Keeping Requirements. Condition D.5.9(a) has been deleted because boilers #1 and #2 have already complied with it.

D. 5.9 New Source Performance Standards [326 IAC 12 and 40 CFR ' 60.40c, Subpart Dc]

Pursuant to 326 IAC 12 and 40 CFR ' 60.40c, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the proposed two (2) 25 mmBtu/hr boilers #1 and #2 are subject to the ' 60.48 Subsections (a), (g) and (i) of this NSPS.

(a) Pursuant to Subsection (a) of ' 60.48, the owner/operator of the two (2) boilers shall submit notification of the date of construction, or reconstruction, anticipated startup and actual startup as provided by ' 60.7 of this part. The notification shall include:

- (1) ~~———— The design heat input capacity of the two (2) boilers and identification of the fuel to be combusted; and~~
- (2) ~~———— The annual capacity factor at which the owner/operator anticipates operating the two (2) boilers, based on all fuels fired and based on individual fuel fired.~~
- (b) ~~———— Pursuant to Subsection (g) ' 60.48, the owner/operator of the two (2) boilers shall maintain records of the amounts of fuel combusted during each month.~~
- (c) ~~———— Pursuant Subsection (i) ' 60.48, all records required in this Section shall be maintained by the owner or operator of the two (2) boilers for a period of two (2) years following the date of such record.————~~

Condition D.5.10 has been deleted from this SECTION because boilers #1 and #2 have been moved to SECTION 2.

D. 5.10 Particulate Emissions Limitation for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the Particulate Matter (PM) emissions from the two (2) 25 million British Thermal Units (mmBtu) boilers shall:

- (a) ~~———— Be limited as follows:~~

Facility	PM Emissions Limit (lb/mmBtu)
Boiler #1	—0.33
Boiler #2	—0.33

~~The PM emissions limits shall be determined using the following equation:~~

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

~~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.~~

- (b) ~~———— Be equipped with Low NO_x burners; and~~
- (c) ~~———— Combust only natural gas.~~

Condition D.5.12 has been deleted from SECTION D.5, since this condition is already included in SECTION C.

D. 5.12 Opacity [326 IAC 5-1]

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

- (a) ~~Opacity shall not exceed an average of thirty percent (30%) 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.~~

Compliance Determination Requirements

For consistency in the name used throughout the permit for the Electrodeposition process, Condition D.5.14, now D.5.7 has been revised as follows:

~~D.5.14~~**5.7** Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11] **[326 IAC 2-2]**

- (a) Compliance stack tests shall be performed on the Regenerative Thermal Oxidizer (RTO) to determine the operating temperature that will achieve the following destruction efficiency and to determine the capture system efficiency for **the each** coating systems **to verify compliance with the VOC limits in Conditions D.5.1 and D.5.2** as follows:

Facility	Destruction Efficiency
E-Coat/ELPO/E-Coat	95%
Primer/ Topcoat Surfacer/Guidecoat System	95%
Topcoat System	95%

- (b) The Compliance stack tests for the Primer/~~Surfacer/Guidecoat~~ and Topcoat System in (a) of this condition shall be made utilizing Method 25 for destruction efficiency, and or other methods as approved by the Commissioner for capture efficiency. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (c) The compliance stack tests shall **be performed** on the Primer/ ~~Surfacer/Guidecoat~~, Topcoat, for PM and PM-10 utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner. The PM and PM10 testing is required to demonstrate that the source is not major for either pollutant, under 326 IAC 2-2, Prevention of Significant Deterioration. This test shall be repeated at least once every two and half (2.5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensable PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- ~~(d)~~ The compliance tests required in (a), (b) and (c) of this condition shall be made within **60 days**, ~~180 days~~ after achieving maximum production rate, but no later

than 365 days after receipt of the Validation Letter from the IDEM, OAM. the
issuance of Significant Permit Modification 141-22830-00031.

Condition D.5.15, now D.5.8 has been modified to incorporate the equation for demonstrating compliance with the PSD BACT limits. Additionally, the equation for Sections (c) and (d) of this condition has been moved from D.5.6, now D.5.2.

D.5.15.8 Volatile Organic Compounds (VOC)

- (a) Compliance with the VOC content and usage limitations contained in Conditions **D.5.1 and D.5.2** 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, OAM-OAQ, reserves the authority to determine the 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.5.1(c) shall be determined using daily volume weighted average of the total mass of VOC emitted per volume of coating solids applied daily and shall be determined using the following equation:

$$G = \frac{\sum_{i=1}^n L_{ci} * D_{ci} * W_{ci} (1-CE)}{\sum_{i=1}^n L_{ci} * V_{si} * T_{ci}}$$

where:

- G = volume weighted average mass of VOC per volume of applied solids (pounds per gallon),
L_{ci} = volume of each applied coating (i) consumed, as received (gallons),
D_{ci} = density of each applied coating (i) as received
W_{oi} = proportion of each applied VOC by weight in each coating (i), as received (pounds VOC / pounds coating),
CE = overall control efficiency
V_{si} = proportion of each applied solids by volume in each coating (i) as received (gallons *solids* / *gallon coating*),
T_{ci} = transfer efficiency for each applied coating (i),

- (c) Pursuant to 326 IAC 8-1-2(7), compliance with the VOC content limit in Condition D.5.2 for coatings applied through spray application system shall be determined using a daily volume weighted average of the coatings applied.
- (d) Pursuant to 326 IAC 8-1-2(10), compliance with the VOC content limit in Condition D.5.2 for coatings applied through dip coating or electrodeposition may be determined using a monthly volume weighted average of the coatings applied.

This volume weighted average in (c) and (d) of this condition shall be determined using the following equation:

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

where:

- A = daily or monthly volume weighted average, lb VOC/gal coating less water
- C = VOC content of coating _i, lb VOC/gal
- U = actual coating _i usage, gal/day or gal/month
- D = coating _i weight % water
- n = no. of coatings used during the day or month
- CE= overall control efficiency of the control system

The following conditions have been added in the Compliance Determination Requirements since these conditions are required under 326 IAC 2-2 and have been numbered D.5.9, and D.5.10. Condition D.5.9 has replaced Condition D.5.21. Subsequent conditions have been re-numbered accordingly:

D.5.21 Operating Parameters

~~The Regenerative Thermal Oxidizer shall maintain a minimum operating temperature of 1350°F or a minimum operating temperature determined in the most recent stack tests to maintain at least 95% destruction efficiency, that is necessary to achieve compliance with condition D.5. 6(c) and D.5. 8. The operating temperature of the exhaust of the RTO shall be continuously recorded whenever it is operating.~~

D.5.9 Thermal Oxidizer Temperature [326 IAC 2-2]

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer 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 Permittee shall operate the thermal oxidizer at or above the three (3) hourly average temperature of 1350°F.
- (b) The Permittee shall determine the three (3) hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in condition D.5.1, 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) hourly average temperature as observed during the compliant stack test.

D.5.10 Parametric Monitoring [326 IAC 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.5.1, as approved by IDEM.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. On and after the date the approved

stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

D.5.17 5.11 Volatile Organic compounds [326 IAC 2-2]

- (a) The Regenerative Thermal Oxidizer (RTO) shall be in operation at all times when the ~~ELPO/E-Coat~~**ELPO** System and the automatic zones for the Primer/~~Surface/Guidecoat System, and~~ Topcoat System are in operation.
- (b) The RTO shall be calibrated, operated and maintained in accordance with the manufacturer's specifications.

D.5.18 5.12 Particulate Overspray

- (a) The ~~wet scrubbers, or dry filters~~ **water wash** shall be in operation or in place at all times when the Primer/~~Surfacer/Guidecoat System,~~ Topcoat System ~~are~~ **is** in operation.
- (b) The dry filters shall be in place at all times the Final and Spot Repair System are in operation.

Conditions D.5.19 and D.5.20 have been deleted from SECTION D.5, since they are general conditions and are already included in SECTION C.

D.5.19 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.~~

D.5.20 Performance Testing [326 IAC 3-6]

- (a) ~~All testing required in D.5.15 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, OAM.~~
~~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 Management
100 North Senate Avenue, P. O. Box 6015~~

~~Indianapolis, Indiana 46206-6015~~

~~no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.~~

- (b) ~~All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.~~

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Condition D.5.13 for Permanent or Temporary Total Enclosure has been deleted from the permit, since the capture efficiency of the paint system is determined during performance test:

~~D.5.13 Permanent or Temporary Total Enclosure [326 IAC 2-2]~~

- ~~(a) The capture system for the E-Coat/ELPO System and the Final Spot Repair shall meet the following criteria for a Permanent or Temporary Total Enclosure:~~
- ~~(1) Any Natural Draft Opening (NDO) shall be at least four (4) equivalent opening diameters from each VOC emitting point.~~
 - ~~(2) Any exhaust point from the enclosure shall be at least four (4) equivalent duct or hood diameters from each NDO.~~
 - ~~(3) The total area of all NDO-s shall not exceed five (5) percent of the surface area of the enclosure-s four (4) walls, floor, and ceiling.~~
 - ~~(4) The average facial velocity (FV) of air through all NDO-s shall be at least 3,600 meter per hour (200 fpm). The direction of air through all NDO-s shall be into the enclosure.~~
 - ~~(5) All access doors and windows whose areas are not included in Section (c) and are not included in the calculations in Section (d) shall be closed during routine operation of the process. or~~
- ~~(b) Verify 100% capture through other methods as approved by the Commissioner.~~

Compliance Monitoring Requirements

The monitoring requirements for the dry filters and water wash have been added in the permit as Condition D.5.13 and have replaced condition D.5.22 for the wet scrubbers:

D.5.13 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters, and to verify the proper flow of water through the water pan of the water wash systems, proper placement and configuration of baffle panels, and other factors that affect water pan capture efficiency (e.g., debris in the water pans). To monitor the performance of the dry filters, and water wash weekly observations shall be made of the overspray from the surface coating booth stacks (S13, S14, S15, S26, S27, S29, S30, S33, S36, S37, S38, S39, S40) 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.5.22 Monitoring

- (a) ~~Daily inspections shall be performed to verify that the liquid levels and flow rates of the wet scrubbers meet the manufacturer's recommended level. To monitor the performance of the wet scrubbers, the scrubbant level of the wet scrubbers shall be maintained weekly at a level where surface agitation indicates impact of the air flow. To monitor the performance of the baffles, weekly inspections of the baffle panels shall be conducted to verify placement and configuration meet recommendations of the manufacturer. In addition, weekly observations shall be made of the overspray from the surface coating booths (Primer Surfacel/Guidecoat, Topcoat and Final and Spot Repair) exhaust stacks while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~
- (b) ~~Monthly inspections shall be performed of the coating emissions from the stack to determine the presence of paint overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change or excessive accumulation in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~
- (c) ~~Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.~~

Condition D.5.23, now D.5.14 has been modified to clarify this condition.

Record Keeping and Reporting Requirements

D.5.23 5.14 Record Keeping Requirements

- (a) To document compliance with Conditions ~~D.5.5, D.5.6, D.5.7, and D.5.21~~ **D.5.1 and D.5.2(b)**, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be sufficient to establish compliance with the VOC usage, **vehicle production limits**, and the VOC emission limits established in Conditions ~~D.5.5, D.5.6, D.5.7, and D.5.21~~ **D.5.1 and D.5.2(b)**.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

- (2) A log of the dates of use.
- (3) The VOC usage each day from the Final and Spot Repair.
- ~~(3) The volume weighted VOC content of the coatings used for each day;~~
- ~~(4) The volume weighted VOC content of the coatings used each day for the Final and Spot Repair;~~
- ~~(5) 4) The cleanup solvent usage for each month.~~
- ~~(6) 5) The total VOC usage for each month.~~
- ~~(7) 6) The weight of VOCs emitted for each compliance period.~~
- (7) Vehicle production for each day and month.**

(b) To document compliance with Conditions D.5.1(c) and D.5.2(a), the Permittee shall maintain records in accordance with (1) through (11) below. Records maintained for (1) through (11) shall be sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.5.1(c) and D.5.2(a).

- (1) The amount and VOC content of each coating material and solvent used daily for coatings sprayed and monthly for coatings applied by the dip tank, purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.**
- (2) A log of the dates of use.**
- (3) The volume weighted VOC content of the coatings applied through spray application for each day.**
- (4) The volume weighted VOC content of the coatings applied from the dip tank for each month.**
- (5) The cleanup solvent/thinners usage for each day from spray application.**
- (6) The cleanup solvent/thinners usage for each month from the dip tank.**
- (7) The total VOC usage for each day from spray application.**
- (8) The total VOC usage for each month from the dip tank.**
- (9) The calculated daily volume weighted average VOC content per gallon of the coatings less water as applied from spray application.**
- (10) The calculated monthly volume weighted average VOC content per gallon of the coatings less water as applied from the dip tank.**

- (11) **The calculated daily volume weighted average emissions in pounds per gallon coating solids.**
- (c) **To document compliance with Condition D.5.13, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections of the water wash and dry filters and a statement that the rate of the liquid level and flow of the water wash was maintained according to the vendor recommended specification.**
- (d) **To document compliance with Condition D.5.9, the Permittee shall maintain continuous temperature records (on a three (3) hour average basis) for the thermal oxidizer and the three (3) hour average temperature used to demonstrate compliance during the most recent compliant stack test.**
- (9) ~~Continuous recorder operating temperature readings from the RTO.~~
- (e) **To document compliance with Condition D.5.10, the Permittee shall maintain daily records of the duct pressure or fan amperage.**
- (f) **Pursuant to 326 IAC 12 (New Source Performance Standards (NSPS)) 40 CFR Part 60.116b(b), Subpart Kb (Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels, Including Petroleum Liquid Storage Vessels), the Permittee shall keep readily accessible records showing the dimension of the storage tanks (ID 101 through ID 107) and an analysis showing their capacities. These records shall be kept for the life of the storage tanks.**
- (b-g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Section (b) of Condition D.5.24, now D.5.15 has been deleted, because it is no longer applicable:

D.5.24 5.15 Reporting Requirements

- (a) A ~~quarterly~~ **monthly** summary of the information to document compliance with Conditions **D.5.1** and ~~D.5.6-5.2(b)~~ shall be submitted **quarterly 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. These reports shall be submitted to the following address:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air ~~Management~~ **Quality**
100 North Senate Avenue, ~~P. O. Box 6015~~
Indianapolis, Indiana ~~46206-6015~~ **46204-2251**
- (b) ~~Pursuant to 326 IAC 12 (New Source Performance Standards (NSPS)) 40 CFR Part 60.40c, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), and 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels, Including Petroleum Liquid Storage Vessels), AM General LLC shall report the following for boiler #1, boiler #2, and VOL vessels:~~
- (1) ~~Commencement of construction date (no later than 30 days after such~~

date);

(2) ~~Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);~~

(3) ~~Actual start-up date (within 15 days after such date); and~~

(4) ~~Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.~~

The following reporting form has been modified to reflect the required daily volume weighted average demonstration of the PSD BACT limit:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Quarterly Report

Source Name:	AM General Corporation
Source Address:	13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address:	13200 McKinley Highway, Mishawaka, Indiana 46545
Part 70	: 141-6023-00031
Facility:	Vehicle (HUMMER II) production
Parameter:	VOC
Limits:	The VOC limits shall be based on a daily-volume- weighted average of the coatings used, and actual transfer efficiencies.

Facility/Operation	VOC Limit (lb of VOC/gallon applied solids (lb/gacs))
ELPO/E-Coat Process and Drying Oven	0.04
Primer Surfacer/Guidecoat	2.9
Primer/Topcoat	5.3 4.5

Month _____ Year _____
Year _____

Month	ELPO/E-Coat Process and Drying Oven VOC Emissions (lb/gacs)	Primer (lb/gacs)		Month	ELPO/E-Coat Process and Drying Oven VOC Emissions (lb/gacs)	Primer/Topcoat (lb/gacs)
1				1		
2				2		
3				3		

Day	E-Coat/ELPO Coat Process and Drying Oven VOC Emissions (lb/gacs)	Primer /Topcoat (lb/gacs)	Day	E-Coat/ELPO Coat Process and Drying Oven VOC Emissions (lb/gacs)	Primer /Topcoat (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

Conclusion and Recommendation

The proposed modification shall be subject to the conditions of the attached **Part 70 PSD/Significant Source Modification No. 141-22343-00031**. The staff recommends to the Commissioner that this Part 70 PSD/significant source modification, be approved.

APPENDIX A

BEST AVAILABLE CONTROL TECHNOLOGY FOR THE H2 PRODUCTION PLANT PRIMER AND TOPCOAT SYSTEMS

Source Name:	AM General LLC
Source Location:	13200 McKinley Highway, Mishawaka, Indiana 46545
County:	St. Joseph
SIC Code:	3711
Operation Permit No.:	T141-6023-00031
Operation Permit Issuance Date:	February 25, 1999
PSD/Significant Source Modification No.:	141-22343-00031
Permit Reviewer:	Aida De Guzman

The following BACT analysis is a re-evaluation of the current PSD BACT for VOC established in PSD Permit No. 141-11673-00031, issued on June 28, 2000 for the H2 plant's primer and topcoat systems.

The current PSD BACT required for the primer and topcoat systems are as follows:

Emission Sources	PSD BACT
Primer	2.9 lbs VOC/gacs
Topcoat	5.3 lbs VOC/gacs

The PSD Permit No. 141-11673-00031, issued on June 28, 2000 required individual limits for the primer and the topcoat. However, AM General LLC had determined during the performance testing of the primer and topcoat coating operations that the VOC capture efficiency as initially anticipated as part of the PSD air permitting process is not achievable. This is essentially due to the following facts:

- (a) Information used in support of the initial PSD permit was based on engineering estimates since this was to be the first type of non-military vehicle with this configuration to be coated and assembled in the United States.
- (b) Because of the lack of available space within the plant, the initial design of having a flash off area after the spray zone prior to oven curing for the primer operation and the topcoat operation had to be altered. This alteration resulted in a common flash off area being shared by the primer and topcoat operations. Subsequently, the primer and topcoat operations lost their independent design and a combined system was established.

Based on the above information, AM General LLC had requested a combined PSD BACT limit for the Primer and Topcoat Systems. The BACT does not involve a physical change or change in the method of operation of the combined coating system. AM General LLC is not proposing a change to the permitted production limit of 86,000 vehicles per 12 consecutive month period, rolled on a monthly basis or the daily maximum production rate of 364 vehicles. AM General LLC is also not requesting an increase in the VOC limitation of 260 tons/year for all facilities combined at the H2 plant. AM General LLC operates a vehicle assembly plant located in Mishawaka, Indiana. The plant is designed to produce the Hummer (H2) sports utility vehicle, which includes a surface coating line that involves applying a primer and topcoat material to the H2 vehicle.

The following is a breakdown of the VOC currently emitted at various zones of the primer and topcoat systems:

Emission Sources	Uncontrolled VOC Emissions
Manual Spray Zones	70.8
Automatic Spray Zones	392.2
Curing Ovens	114.5

AM General LLC, has submitted the following BACT analysis for VOCs using the "Top Down BACT Guidance" published by the U.S. EPA, Office of Air Quality Planning and Standards, March 15, 1990.

Several sources were consulted regarding similar operations and associated controls implemented. These sources include the U.S. EPA RACT/BACT/LAER Clearinghouse database for process type 41.002 (Automobiles and Trucks Surface Coating), recent permit applications, USEPA, air permitting authorities, and equipment vendors.

Step 1: Identification of control technologies for the body painting operations:

- (1) Condensation System – This system utilizes a refrigerant to cool the exhaust stream, effect a phase change from gas to liquid for a target volatile constituent with ascertainable phase-change conditions, collect the liquid, and thereby lower the concentration in the gas phase. However, this technology is only effective under high concentration gradients in excess of 100 ppmv. The exhaust streams associated with the AM General LLC operations are very dilute consisting of many constituents which would preclude any effective technical applicability of a condensation system.

In conclusion, condensation technology is not considered technically feasible to reduce VOC emissions from the manual, automatic zones, as well as the curing ovens associated with the primer and topcoat systems. Air flow from these individual zones, automatic zones and curing ovens would be well outside the flow range associated with condensation units. Condensation system is therefore eliminated from further consideration in this BACT analysis because of technical infeasibility.

- (2) Carbon Adsorption – Activated carbon beds have a track record of successful application for adsorbing specific VOC emissions. However, the application of the technology is subject to certain limitations which can negate its applicability for specific organic streams. Whenever an exhaust stream contains other contaminants such as particulates and moisture, the technology loses its efficiency. The presence of moisture and particulates in the stream will require significant gas pre-conditioning since these interferences are deleterious to the efficiency of the carbon bed. In effect, they induce a masking phenomenon reducing the available adsorption surface area.

In addition, very dilute exhaust streams would significantly impair the effective technical applicability of a carbon adsorption system which starts to collapse at inlet VOC concentration less than approximately 50 ppmv. In addition, the exhaust from the various operations would contain a highly variable complex of volatile compounds which would limit the effectiveness of carbon adsorption due

to the interaction between chemical components, preferential adsorption and premature breakthrough. The desorption cycle would involve reentrainment of the VOCs unless they were further controlled by an oxidization scheme.

In conclusion, carbon adsorption technology by itself is not considered technically feasible to reduce VOC emissions from the manual, automatic zones and curing ovens associated with the primer and topcoat systems emission sources for the reasons noted above. Carbon adsorption by itself is therefore eliminated from further consideration due to technical infeasibility in this BACT analysis.

- (3) Polyad™ System – This is an innovative system offered by a microwave technology vendor combining resin fluidized bed adsorption with microwave dynamic bed desorption that claims VOC control primarily for stripping VOCs from SVE (soil vapor extraction) units, air stripping at remediation sites, and solvent recovery. In addition to the fact that the technology does not have a track record for vehicle painting operations, there are other significant reservations regarding its technical applicability. Any adsorption system would suffer from similar limitations as those summarized below:

- (i) Impaired efficiency due to dilute inlet stream concentrations as discussed earlier;
- (ii) Effect of interferences such as particulates, moisture and the presence of certain constituents which are particularly deleterious as discussed earlier;

Reentrainment of VOCs during microwave desorption; and Microwave desorption technology is not a proven technology for application in the surface coating industry.

In conclusion, the Polyad™ adsorption/microwave desorption technology is not considered technically feasible to reduce VOC emissions from the primer and topcoat systems manual and automatic zones, as well as curing ovens, and will be eliminated from further consideration in this BACT analysis.

- (4) Flares – A VOC combustion control process, in which the VOCs are piped to a remote, usually elevated location and burned in an open flame in the open air using a specially designed burner tip, auxiliary fuel, and air to promote mixing for destruction. Completeness of combustion in a flare is governed by flame temperature, residence time in the combustion zone, turbulent mixing of the gas stream components to complete the oxidation reaction, and available oxygen for free radical formation. Combustion is complete if all VOC emissions are converted to carbon dioxide and water. Incomplete combustion results in some of the VOCs being unaltered or converted to other organic compounds such as aldehydes or acids. This technology has been determined to be inappropriate for the type of emission sources associated with the primer and topcoat painting systems due to the large volume of air flow (i.e., 50,000 scfm).

In conclusion, a flare is not considered to be technically feasible to reduce VOC emissions from the primer and topcoat systems manual and automatic zones, as well as curing ovens and will be eliminated from further consideration in this BACT analysis.

- (5) Volume/Rotary Concentrators - This twin part system also known as the rotary concentrator serves to concentrate the VOC's in the inlet stream prior to an adsorption or oxidation scheme. The first section consists of a slowly rotating concentrator wheel that utilizes zeolites or carbon deposited on a substrate, which adsorbs the organics as they are exhausted from the original process and passed through the wheel. A sector of the concentrator wheel is partitioned off from the main section of the rotor and clean heated air is passed through this section to desorb the organics resulting in higher VOC concentration in a smaller gas flow.

Volume/rotary concentrators are usually installed upstream to an adsorption or oxidization configuration for ultimate VOC destruction. However, since the fundamental mechanism of VOC removal from the air stream is adsorption, the limitations discussed earlier for adsorption systems are present here resulting in questionable effective technical applicability.

In conclusion, the technology is considered technically feasible with some reservations to reduce VOC emissions from the primer and topcoat systems manual, automatic zones, and curing oven. Further consideration of this technology in conjunction with a thermal oxidizer is provided in this BACT analysis for the primer and topcoat manual and automatic spray zones. This consideration includes an economic impact evaluation of the cost effectiveness for this type of control device. This technology is not technically feasible for the curing ovens.

- (6) Biofiltration – This is an air pollution control technology in which off-gases containing biodegradable organic compounds are vented, under controlled temperature and humidity, through a biologically active material. The microorganisms contained in the bed of compost-like material digest or biodegrade the organic to CO₂ and water. This technology has been largely utilized for control of odorous emissions with a clearly speciated air stream. The process of biofiltration utilizes a biofilm containing a population of microorganisms immobilized on a porous substrate such as peat, soil, sand, wood, compost, or numerous synthetic media. As an air stream passes through the biofilter, the contaminants in the air stream partition from the air phases to the liquid phase of the biofilm. Once the contaminants pass into the liquid phase, they become bioavailable for complex oxidative process by the microorganisms inhabiting the biofilm.

The bioscrubber is an enhancement of the biotricking filter whereby a packed tower is flooded with a liquid-phase and the discharge effluent is retained in a sump for added time to improve the microbe contact time. The advantages of a bioscrubber are as follows - no gas conditioning or humidification required, smaller footprint than other reactors, process suitable for neutralizing acids formed in-situ during treatment, and lesser interference from particulates. The disadvantages of a biofiltration system include complex feeding and neutralizing systems and the handling of toxic chemicals to control biomass growth.

Most bioreactors have large footprints, are maintenance intensive, operate in narrow bands of temperature and pressure requiring expensive gas conditioning, and have primarily been used for odor control in clearly speciated air streams. Because of the size of a biofiltration system, existing space at the plant would not be available to support this type of system.

In conclusion, due to the above operational limitations, the technology is not

considered technically feasible to reduce VOC emissions from the manual and automatic spray zones associated with the primer and topcoat systems as well as the curing ovens, and will be eliminated from further consideration in this BACT analysis due to technical reasons.

- (7) Membrane Separation Technology – This organic vapor/air separation technology involves the preferential transport of organic vapors through a non-porous gas separation membrane via a diffusion process analogous to pumping saline water through a reverse osmosis membrane. In this system, the feed stream is compressed to approximately 150 psig and sent to a condenser where the liquid solvent is recovered. The condenser bleed stream is sent to the membrane module comprised of spirally-wound modules of thin film membranes separated by plastic mesh spacers. The concentrated stream from the membrane module is returned to the compressor for further recovery in the condenser. There is no known application of membrane separation technology for primer and topcoat painting systems.

In conclusion, since there is no known application of this technology for a primer and topcoat paint system, this technology is not considered technically feasible to reduce VOC emissions from the manual, automatic zones, and curing ovens associated with the primer and topcoat systems and will be eliminated from further consideration in this BACT analysis.

- (8) Ultraviolet (UV) Oxidation – UV light oxidation (or photolytic destruction) of vapor-phase contaminants is accomplished by passing the off-gas in close proximity to a powerful UV light source. Oxidation occurs as a result of reactions with hydroxyl radicals produced by the UV light. The photo-oxidation usually is supplemented by a gaseous chemical oxidant (i.e., ozone) or a solid catalyst (e.g., TiO_2). The process is best used to treat easily oxidized organic compounds, such as those with double bonds (e.g., trichloroethylene, perchloroethylene and vinyl chloride) as well as simple aromatic compounds (e.g., toluene, benzene, xylene, and phenol).

Initially, this technology emerged as a biocidal technology for water treatment since bacteria are destroyed at a wavelength of 254 nanometers. Additionally, it was recognized that the technology was also useful in cleaving and ionizing certain organics so that they are easily removed by deionization and organic scavenging cartridges in a polishing loop. This technology has been proposed for offgas treatment from SVE and other groundwater remediation units by the DOE. Based on a review of the previously listed resources including the RBLC database, there are no known applications of UV oxidation technology for primer and topcoat painting systems. For this application, the technology suffers from the following effective technical applicability reservations:

- (i) UV light frequency must be selected for maximum VOC removal based on inlet stream VOC species and concentrations. Questionable effectiveness for a matrix of volatile constituents with variable photolytic destruction isotherms, interaction between chemical constituents, preferential destruction and premature breakthroughs for non-oxidizable species;
- (ii) Pretreatment of inlet gas required to minimize ongoing cleaning and maintenance of UV reactor and quartz sleeves;
- (iii) Potential fouling of solid TiO_2 catalyst by interferences such as particulates, moisture and long-chain organics;

- (iv) Prohibitive energy requirements to power the UV reactor in excess of competing technologies; and
- (v) Extensive maintenance and calibration requirements.

In conclusion, due to the above technical applicability reservations, this technology is not considered technically feasible to reduce VOC emissions from the manual, automatic zones, and curing ovens used in the primer and topcoat systems and will be eliminated from further consideration in this BACT analysis.

- (9) Non-Thermal Plasma (NTP) Technology – NTP technology was developed by the Los Alamos National Lab for the DOD and DOE as part of a new generation of VOC control options. The intent of the research was to develop a low-cost solution with reduced energy and power requirements for controlling a host of air contaminants including VOCs. An NTP is an electrically neutral form of gas containing substantial concentrations of electrons, ions and other highly reactive free radicals which may be generated in the gas stream by application of electrical energy. In theory, the sequential chemical reactions result in the destruction of the air contaminants. Other research organizations such as Batelle have developed NTP variants such as the Gas Phase Corona Reactor (GPCR) which creates non-thermal plasma in a reactor filled with dielectric packing which significantly improves reactor performance.

The U.S Navy sought to be one of the first to install NTP technology for controlling paint booth VOC emissions. However, at this time, the technology is not “off-the shelf” and not widely commercially available in the United States. Due to the lack of commercially available equipment in the United States, the Navy was unable to procure the equipment.

In conclusion, on account of the above lack of commercial availability and proven track record in controlling VOC emissions in large coating operations, this technology is not considered technically feasible to reduce VOC emissions from the manual, automatic zones, and curing ovens associated with the primer and topcoat systems, and will be eliminated from further consideration in this BACT analysis.

- (10) Catalytic Incineration – Catalytic incinerators are control devices in which the solvent laden air is preheated and the organic HAPs are ignited and combusted to carbon dioxide and water. In the presence of a catalyst this reaction will take place at lower temperatures than those required for thermal oxidation. Temperatures between 350 and 500 degrees Celsius are common. The catalysts are metal oxides or precious metals where they are supported on ceramic or metallic substrates. Catalytic incinerators can achieve control device efficiencies of 95 to 99 percent.

From an operational standpoint, the lower reaction temperature means that the requirement for supplemental fuel is reduced or eliminated during normal operation. The lower operating temperatures will also decrease the formation of oxides of nitrogen.

In conclusion, a catalytic incinerator by itself would not be technically feasible for controlling VOC emissions from the manual and automatic spray zones because of the large volume of air (i.e., approximately 50,000 cfm) and the variability of VOC concentration levels. The lower VOC concentration loading in the curing

ovens also make catalytic incineration questionable when trying to achieve higher VOC destruction efficiencies (i.e., >95%). It is possible to use a catalytic incinerator in conjunction with a rotary concentrator to control VOC emission from surface coating operations. However, in the automotive industry, a rotary concentrator or booth recirculation is typically employed with a thermal oxidizer. The incorporation of a catalytic incinerator is not considered to be feasible because of the following reasons:

- (i) Potential contamination of the catalyst;
- (ii) A catalytic incinerator cost approximately two times more than a thermal oxidizer;
- (iii) The energy requirements associated with a catalytic incinerator are roughly 1.2 times higher than that of a thermal oxidizer; and
- (iv) The requirements to deal with the spent catalyst require additional involvement of staff personnel.

Catalytic incineration is thus deemed technically infeasible when compared to thermal oxidation and as a result will be excluded from further evaluation in this BACT evaluation for the primer and topcoat systems manual, automatic zones, and the curing ovens.

- (11) Thermal oxidation – Thermal oxidizers are control devices in which the solvent laden air is preheated and the organic HAPs are ignited and combusted to carbon dioxide and water. Dilute gas streams require auxiliary fuel (generally natural gas) to sustain combustion. Various incinerator designs are used by different manufacturers. The combustion chamber designs must provide high turbulence to mix the fuel and solvent laden air. The other requirement is enough residence time to ensure essentially complete combustion. Thermal oxidizers can be operated to achieve a wide range of control device efficiencies. Efficiencies of 95 percent are possible.

In conclusion, because of large volume of air associated with each manual and automatic spray zone (i.e., approximately 50,000 cfm) and the variability of VOC concentration levels, the use of only thermal oxidation by itself to control VOC emissions from the manual and automatic zones has been deemed to be technically infeasible. However, inclusion of a thermal oxidizer with a rotary concentrator is technically feasible for controlling VOC gases from the exhaust streams associated with the manual and automatic spray zones sections of the primer and topcoat systems. The economic, energy and environmental impacts associated with this technology are further discussed in the BACT analysis. The use of thermal oxidation to control VOC emissions from the primer and topcoat systems curing oven is technically feasible and considered the top level of control for reducing VOC emissions.

Step 2: Eliminate Technically Infeasible Options:

As shown in Step 1, the only remaining viable control technology for the primer and topcoat manual spray zones is a rotary concentrator or similar technology in combination with thermal oxidation. This type of technology has been shown to be effective at reducing VOC emissions from coating systems with large volumes of air and low VOC concentration levels and can be considered the top alternative for controlling VOC emissions from spray coating operations. As noted above, thermal oxidation is

considered the top alternative for controlling VOC emissions from coating system curing ovens.

AM General LLC currently employs a Regenerative Thermal Oxidizer (RTO) at the Mishawaka H2 assembly plant. This RTO is designed to destroy VOCs present in the exhaust air streams associated with the plant's primer and topcoat automatic spray zones and curing ovens. The current capacity of the RTO prohibits the inclusion of additional exhaust gas streams associated with the plant's manual zones. The physical constraints of the existing gas train, controls, burners, chambers, etc. are inadequate to satisfy the (approximate) doubling of thermal requirements necessary to accept even one of the manual paint zones. Retrofit of this unit to accommodate greater air flow is physically impossible and the burner will not support, nor would the unit survive, the resultant temperature increase necessary to destroy VOC in this RTO. As a result, AM General LLC has concluded that **retrofitting the existing RTO is not a viable option.**

Step 3: Evaluate Most Effective Controls:

Further evaluation, including economic, energy and environmental impacts were made for controlling VOC emissions from the manual spray zones. As noted previously, the only viable VOC control option is rotary concentration and thermal oxidization on the primer and topcoat manual spray zones.

There are no sources in the automotive and light-duty truck industry that control the manual zones of the painting area, because it is not technically feasible to recirculate the air flow from the booths' manual zones because of human exposure. However, the following cost analysis was still performed to show the cost effectiveness of controlling these manual zones.

The following cost analysis for the Primer and Topcoat manual zones was for new separate control systems and for one new control system for all manual zones, since it is not feasible to retrofit the existing RTO as explain in Step 2. The cost analysis was based on vendor quotes for similar operations and the Office of Air Quality Planning and Standards Control OAQPS Cost Manual, Sixth Edition, EPA 452/B-02-001 (January, 2002):

Table 1 - COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE PRIMER MANUAL ZONE				
CAPITAL COSTS				
			Gas Flow Rate	51,250 scfm
1.	Purchased Equipment			
	a.	Basic Equipment (A)		\$ 1,025,000.00
		Auxiliary (A)		\$ 25,000.00
			Total (A)	\$ 1,050,000.00
		Instrumentation (0.10 A)		\$ 103,000.00
	c.	Taxes (0.05 A)		\$ 52,500.00
	d.	Freight (0.05 A)		\$ 52,500.00
	Total Purchased Equipment Cost (B)			\$ 1,258,000.00
2.	Direct Installation Costs (DI)			
	a.	Foundations & Supports (0.08 B)		\$ 100,640.00
	b.	Erection & Handling (0.14 B)		\$ 176,120.00
	c.	Electrical (0.04 B)		\$ 50,320.00
	d.	Piping (0.02 B)		\$ 25,160.00
	e.	Insulation (0.01 B) + Painting (0.01B)		\$ 25,160.00
	g.	Site Preparation (Eng. Estimate)		\$ 30,000.00
	Total Direct Installation Costs (DI)			\$ 407,400.00
	Total Direct Costs (TDC) = (Purchased + Installation)			\$ 1,665,400.00
	Indirect Installation Costs (IC)			
3.	Engineering & Supervision (0.1 B)			\$ 125,800.00
4.	Construction & Field Expenses (0.05 B)			\$ 62,900.00
5.	Contractor Fees (0.10 B)			\$ 125,800.00
6.	Start Up Costs (0.02 B)			\$ 25,160.00
7.	Performance Test (0.01 B)			\$ 12,580.00
8.	Contingency (0.03 B)			\$ 37,740.00
	Total Indirect Installation Costs (IC)			\$ 389,980.00
	Total Capital Investment (TCI)			\$ 2,055,380
ANNUALIZED COSTS				
Direct Operating Costs (DA)				
1.	Operating Labor			

Table 1 - COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE PRIMER MANUAL ZONE				
	a.	Operator (1 hr/day, 236 days/yr, \$20/hr) + Supervisor (15% of Operator)		\$ 5,000.00
		Maintenance		
3.		Labor (1hr/day, 236 days/yr, \$20/hr) + Materials (100% of Labor)		\$ 9,000.00
5.		Utilities		
	a.	Natural Gas (0.02 scfm/acfm flow (10% of total air flow is treated in the oxidizer following concentration) for 5,664 hrs/yr @ \$10/1000ft ³)		\$ 348,000
	b.	Electricity (0.0015 kW-hr/acfm flow for 5,664 hrs/yr @ 0.05/kW-hr)		\$ 22,000
		Total Direct Operating Costs (DA)		\$ 384,000.00
		Indirect Operating Costs (IA)		
6.		Overhead (60% of Operating Labor & Maintenance)		\$ 8,000.00
7.		Property Tax (0.01 TCI)		\$ 20,554.00
8.		Insurance (0.01 TCI)		\$ 20,554
9.		Administrative Costs (0.02 TCI)		\$ 41,107.00
10.		Capital Cost Recovery Factor (7% INT, 15 Years)		\$ 225,680.00
	=	0.1098 * TCI)		
		Total Indirect Operating Costs (IA)		\$ 315,895.00
		Total Operating Cost (DA + IA)		\$ 699,895.00
		Baseline VOC Emissions from Primer Zone (27 tons/yr)		27.00
		Annual VOC Removal @ 85% Efficiency in TPY		22.95
		Emission Rate - TPY - After Controls		4.05
		Cost Effectiveness, \$/Ton VOC Removed		\$ 30,500.00

Table 2 -COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE TOPCOAT (BASECOAT) MANUAL ZONE				
CAPITAL COSTS				
			Gas Flow Rate	51,250 scfm
1.		Purchased Equipment		
	a.	Basic Equipment (A)		\$ 1,025,000.00
		Auxiliary (A)		\$ 25,000.00
			Total (A)	\$ 1,050,000.00
		Instrumentation (0.10 A)		\$ 105,000.00
	c.	Taxes (0.05 A)		\$ 52,500.00
	d.	Freight (0.05 A)		\$ 52,500.00
		Total Purchased Equipment Cost (B)		\$ 1,260,000.00

Table 2 -COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE TOPCOAT (BASECOAT) MANUAL ZONE			
2.	Direct Installation Costs (DI)		
a.	Foundations & Supports (0.08 B)		\$ 100,800.00
b.	Erection & Handling (0.14 B)		\$ 176,400.00
c.	Electrical (0.04 B)		\$ 50,400.00
d.	Piping (0.02 B)		\$ 25,200.00
e.	Insulation (0.01 B) + Painting (0.01B)		\$ 25,200.00
g.	Site Preparation (Eng. Estimate)		\$ 30,000.00
	Total Direct Installation Costs (DI)		\$ 408,000.00
	Total Direct Costs (TDC) = (Purchased + Installation)		\$ 1,668,000.00
	Indirect Installation Costs (IC)		
3.	Engineering & Supervision (0.1 B)		\$ 126,000.00
4.	Construction & Field Expenses (0.05 B)		\$ 63,000.00
5.	Contractor Fees (0.10 B)		\$ 126,000.00
6.	Start Up Costs (0.02 B)		\$ 25,200.00
7.	Performance Test (0.01 B)		\$ 12,600.00
8.	Contingency (0.03 B)		\$ 37,800.00
	Total Indirect Installation Costs (IC)		\$ 390,600.00
	Total Capital Investment (TCI)		\$ 2,058,600.00
	ANNUALIZED COSTS		
	Direct Operating Costs (DA)		
1.	Operating Labor		
a.	Operator (1 hr/day, 236 days/yr, \$20/hr) + Supervisor (15% of Operator)		\$ 5,000.00
	Maintenance		
3.	Labor (1hr/day, 236 days/yr, \$20/hr) + Materials (100% of Labor)		\$ 9,000.00
5.	Utilities		
a.	Natural Gas (0.02 scfm/acfm flow (10% of total air flow is treated in the oxidizer following concentration) for 5,664 hrs/yr @ \$10/1000ft ³)		\$ 348,000
b.	Electricity (0.0015 kW-hr/acfm flow for 5,664 hrs/yr @ 0.05/kW-hr)		\$ 22,000
	Total Direct Operating Costs (DA)		\$ 384,000.00
	Indirect Operating Costs (IA)		
6.	Overhead (60% of Operating Labor & Maintenance)		\$ 8,000.00
7.	Property Tax (0.01 TCI)		\$ 20,586.00

Table 2 -COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE TOPCOAT (BASECOAT) MANUAL ZONE			
8.	Insurance (0.01 TCI)		\$ 20,586.00
9.	Administrative Costs (0.02 TCI)		\$ 41,172.00
10.	Capital Cost Recovery Factor (7% INT, 15 Years)		\$ 226,034.00
	=	0.1098 *(TCI)	
	Total Indirect Operating Costs (IA)		\$ 316,378.00
	Total Operating Cost (DA+ IA)		\$ 700,378.00
		Baseline VOC Emissions from Basecoat Zone (25 tons/yr)	25.00
		Annual VOC Removal @ 85% Efficiency in TPY	21.25
		Emission Rate - TPY - After Controls	3.75
	Cost Effectiveness, \$/Ton VOC Removed		\$ 32,959.00

Table 3 COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE TOPCOAT (CLEARCOAT) MANUAL ZONE AND REPAIR AREAS			
CAPITAL COSTS			
		Gas Flow Rate	41,250 scfm
1.	Purchased Equipment		
	a.	Basic Equipment (A)	\$ 825,000 .00
		Auxiliary (A)	\$ 25,000 .00
		Total (A)	\$ 850,000.00
		Instrumentation (0.10 A)	\$ 85,000.00
	c.	Taxes (0.05 A)	\$ 42,500.00
	d.	Freight (0.05 A)	\$ 42,500.00
	Total Purchased Equipment Cost (B)		\$ 1,020,000.00
2.	Direct Installation Costs (DI)		
	a.	Foundations & Supports (0.08 B)	\$ 81,600.00
	b.	Erection & Handling (0.14 B)	\$ 142,800.00
	c.	Electrical (0.04 B)	\$ 40,800.00
	d.	Piping (0.02 B)	\$ 20,400.00
	e.	Insulation (0.01 B) + Painting (0.01B)	\$ 20,400.00
	g.	Site Preparation (Eng. Estimate)	\$ 30,000.00
	Total Direct Installation Costs (DI)		\$ 336,000.00
	Total Direct Costs (TDC) = (Purchased + Installation)		\$ 1,356,000.00
	Indirect Installation Costs (IC)		

Table 3 COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE TOPCOAT (CLEARCOAT) MANUAL ZONE AND REPAIR AREAS			
3.	Engineering & Supervision (0.1 B)		\$ 102,000.00
4.	Construction & Field Expenses (0.05 B)		\$ 51,500.00
5.	Contractor Fees (0.10 B)		\$ 102,000.00
6.	Start Up Costs (0.02 B)		\$ 20,400.00
7.	Performance Test (0.01 B)		\$ 10,200.00
8.	Contingency (0.03 B)		\$ 30,600.00
	Total Indirect Installation Costs (IC)		\$ 316,700.00
	Total Capital Investment (TCI)		\$ 1,672,700
ANNUALIZED COSTS			
Direct Operating Costs (DA)			
1.	Operating Labor		
	a.	Operator (1 hr/day, 236 days/yr, \$20/hr) + Supervisor (15% of Operator)	\$ 5,000.00
		Maintenance	
3.	Labor (1hr/day, 236 days/yr, \$20/hr) + Materials (100% of Labor)		\$ 9,000.00
5.	Utilities		
	a.	Natural Gas (0.02 scfm/acfm flow (10% of total air flow is treated in the oxidizer following concentration) for 5,664 hrs/yr @ \$10/1000ft³)	\$ 280,000
	b.	Electricity (0.0015 kW-hr/acfm flow for 5,664 hrs/yr @ 0.05/kW-hr)	\$ 18,000
	Total Direct Operating Costs (DA)		\$ 312,000.00
Indirect Operating Costs (IA)			
6.	Overhead (60% of Operating Labor & Maintenance)		\$ 8,000.00
7.	Property Tax (0.01 TCI)		\$ 16,727.00
8.	Insurance (0.01 TCI)		\$ 16,727.00
9.	Administrative Costs (0.02 TCI)		\$ 33,454.00
10.	Capital Cost Recovery Factor (7% INT, 15 Years)		\$ 183,662 .00
	=	0.1098 * (TCI)	
	Total Indirect Operating Costs (IA)		\$ 258,570.00
	Total Operating Cost (Direct + Indirect)		\$ 570,570.00
		Baseline VOC Emissions from Clearcoat Manual Zone (18 tons/yr)	18.00
		Annual VOC Removal @ 85% Efficiency in TPY	15.3
	Emission Rate - TPY - After Controls		2.70

Table 3 COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE TOPCOAT (CLEARCOAT) MANUAL ZONE AND REPAIR AREAS			
	Cost Effectiveness, \$/Ton VOC Removed		\$ 37,292.00

Table 4 COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE VOC FROM ALL MANUAL ZONES				
CAPITAL COSTS				
			Gas Flow Rate	143,750 scfm
1.	Purchased Equipment			
	a.	Basic Equipment (A)		\$ 2,875,000 .00
		Auxiliary (A)		\$ 25,000 .00
			Total (A)	\$ 2,900,000.00
		Instrumentation (0.10 A)		\$ 290,000.00
	c.	Taxes (0.05 A)		\$ 145,000.00
	d.	Freight (0.05 A)		\$ 145,000.00
	Total Purchased Equipment Cost (B)			\$ 3,480,000.00
2.	Direct Installation Costs (DI)			
	a.	Foundations & Supports (0.08 B)		\$ 278,400.00
	b.	Erection & Handling (0.14 B)		\$ 487,200.00
	c.	Electrical (0.04 B)		\$ 139,200.00
	d.	Piping (0.02 B)		\$ 69,600.00
	e.	Insulation (0.01 B) + Painting (0.01B)		\$ 69,600.00
	g.	Site Preparation (Eng. Estimate)		\$ 30,000.00
	Total Direct Installation Costs (DI)			\$ 1,074,000
	Total Direct Costs (TDC) = (Purchased + Installation)			\$ 4,554,000.00
Indirect Installation Costs (IC)				
3.	Engineering & Supervision (0.1 B)			\$ 348,000.00
4.	Construction & Field Expenses (0.05 B)			\$ 174,000.00
5.	Contractor Fees (0.10 B)			\$ 348,000.00
6.	Start Up Costs (0.02 B)			\$ 69,600.00
7.	Performance Test (0.01 B)			\$ 34,800.00
8.	Contingency (0.03 B)			\$ 104,400.00
	Total Indirect Installation Costs (IC)			\$ 1,078,800.00
	Total Capital Investment (TCI)			\$ 5,632,800.00

Table 4 COST ANALYSIS FOR A ROTARY CONCENTRATOR WITH THERMAL OXIDATION CONTROLLING THE VOC FROM ALL MANUAL ZONES			
ANNUALIZED COSTS			
Direct Operating Costs (DA)			
1.	Operating Labor		
	a.	Operator (1 hr/day, 236 days/yr, \$20/hr) + Supervisor (15% of Operator)	\$ 5,000.00
	Maintenance		
3.	Labor (1hr/day, 236 days/yr, \$20/hr) + Materials (100% of Labor)		
5.	Utilities		
	a.	Natural Gas (0.02 scfm/acfm flow (10% of total air flow is treated in the oxidizer following concentration) for 5,664 hrs/yr @ \$10/1000ft ³)	\$ 977,000
	b.	Electricity (0.0015 kW-hr/acfm flow for 5,664 hrs/yr @ 0.05/kW-hr)	\$ 61,000
	Total Direct Operating Costs (DA)		
			\$ 1,052,000.00
Indirect Operating Costs (IA)			
6.	Overhead (60% of Operating. Labor & Maintenance)		
			\$ 8,000.00
7.	Property Tax (0.01 TCI)		
			\$ 56,328.00
8.	Insurance (0.01 TCI)		
			\$ 56,328.00
9.	Administrative Costs (0.02 TCI)		
			\$ 112,656.00
10.	Capital Cost Recovery Factor (7% INT, 15 Years)		
			\$ 618,481.00
	=	0.1098 * (TCI)	
	Total Indirect Operating Costs (IA)		
			\$ 851,793.00
	Total Operating Cost (Direct + Indirect)		
			\$ 1,903,793.00
	Baseline VOC Emissions from Clearcoat Manual Zone (18 tons/yr)		
			71.00
	Annual VOC Removal @ 85% Efficiency in TPY		
			60.38
	Emission Rate - TPY - After Controls		
			10.62
	Cost Effectiveness, \$/Ton VOC Removed		
			\$ 31,530.00

Based on the economic evaluation in controlling the manual zones for the primer and topcoat systems separately and controlling all manual zones, the costs ranged from approximately \$31,000 per ton of VOC removed to \$37,000 per ton of VOC removed. It is shown that it is cost prohibitive to control the manual zones and in addition, no other sources in the industry control the manual zone areas.

Step 4: Selection of PSD BACT:

The BACT VOC limitations in pounds of VOC per gallon of applied coating solids (lbs/gacs) reference in the following table include the reductions achieved through the use of the associated control devices, control techniques, work practices, and the use of waterbased coatings:

BACT/LAER ESTABLISHED FOR PRIMER AND TOPCOAT SYSTEMS IN AUTOMOBILE AND LIGHT DUTY TRUCK MANUFACTURING			
Company Name/Year Permitted	Operation	*BACT VOC Limits	Control Technology
Proposed BACT for AM General LLC – Mishawaka, Indiana	Primer/Topcoat System	From individual limit Primer - 2.9 lb/gacs and topcoat - <u>5.3 lb/gacs</u> 8.2 lbs VOC/gacs to a combined limit of 4.5 lb VOC/gacs (daily volume weighted average)	RTO with a 95% destruction removal efficiency (DRE) controlling the automatic zones and curing ovens
Honda Manufacturing of Indiana, Greensburg, Indiana	Primer application	3.46 lbs VOC/gacs (daily volume weighted average)	RTO with a 95% DRE controlling the bake oven, and using waterborne primer
	Topcoat application	5.2 lbs VOC/gacs (daily volume weighted average)	Topcoat oven controlled by an RTO with a 95% DRE
Toyota Motor Manufacturing - San Antonio, TX 6/21/04	Primer application	4.1 lbs VOC/gacs (averaging time is not specified)	Waterborne primers, High efficiency applicators, Curing oven controlled by a thermal oxidizer with 95% DRE
	Topcoat application	5.2 lbs VOC/gacs (averaging time is not specified)	Waterbased basecoat, High efficiency applicators, Thermal oxidizer controlling curing oven exhaust with a 95% DRE Carbon adsorber/thermal oxidizer controlling clearcoat automatic spray zones with 86% DRE
	Primer, Topcoat, and Window Installation	4.6 lb VOC/gacs Combined Limit (averaging time is not specified)	Thermal oxidizer with 95% DRE controlling primer curing oven 95% DRE carbon adsorber/thermal oxidizer controlling topcoat ovens 85% for the clearcoat automatic zones
Hyundai Motor Manufacturing of Alabama, LLC - Alabama 3/23/04	Primer application	4.1 lb VOC/gacs (monthly volume weighted average)	Waterbased primer surfacer coating, RTO with 95% DRE controlling curing oven
	Topcoat application	5.2 lb VOC/gacs (monthly volume weighted average)	RTO with 95% DRE controlling curing oven and auto clearcoat zone, Waterbased basecoat, Solvent based clearcoat

BACT/LAER ESTABLISHED FOR PRIMER AND TOPCOAT SYSTEMS IN AUTOMOBILE AND LIGHT DUTY TRUCK MANUFACTURING			
Honda Manufacturing of Alabama, LLC - Alabama 10/18/02	Primer application	4.1 lb VOC/gacs (monthly volume weighted average)	RTO with 95% DRE controlling curing oven, Waterbased primer
	Topcoat application	5.2 lb VOC/gacs (monthly volume weighted average)	RTO with 95% DRE controlling curing oven and automatic clearcoat zone, Waterbased basecoat, Solventbased clearcoat
General Motors Lansing Craft Centre – Lansing, Michigan 4/2/02	Primer application	38 tons/yr 12 mo average, 424 lbs/day, 5.29 lb VOC/gacs 1-day average	RTO controlling automatic zone and curing oven
	Topcoat application	125 tons/yr 12 mo average, 1391.1 lbs/day, 6.6 lb/gacs	95% RTO destruction efficiency controlling basecoat flashoff, clearcoat automatic zone and oven
GM Flint Assembly – Flint, Michigan	Primer application	3.46 lbs VOC/gacs (daily volume weighted average)	71% carbon concentrator/thermal oxidizer destruction efficiency, 100% capture of flashoff and ovens, 85% capture in booths Solventbased antichip, primer, color prime and flatblack

AM General LLC current PSD BACT, which is a separate limit of 2.9 lbs/gacs for the Primer and 5.3 lbs/gacs for the Topcoat systems with both curing ovens controlled by a Regenerative Thermal Oxidizer with a 95% DRE, was the most stringent BACT limit and control technology at the time it was established on June 28, 2000. Its Primer BACT limit is still the most stringent BACT for the industry. Honda's BACT and Hyundai's BACT are the most stringent for the Topcoat System, which were established subsequent to AM General on October 19, 2006, and March 23, 2004, respectively. However, based on the configuration and lack of available space within the plant, the initial design of having a flash off area after the spray zone prior to oven curing for the primer operation and the topcoat operation had to be altered. This alteration resulted in a common flash off area being shared by the primer and topcoat operations. Subsequently, the primer and topcoat operations lost their independent design and a combined system was established. Based on this configuration it is not possible to demonstrate compliance with the individual BACT limits.

Each of the above sources has BACT limits for Primer and Topcoat that when combined are greater than the combined limit of 4.5 lbs/gacs. The proposed combined limit of 4.5 lbs/gacs is more stringent than the only combined Topcoat and Primer BACT limit for Toyota Motor Manufacturing Texas, Inc., located in San Antonio, Texas. Additionally, the sum for AM General current individual limits from the Primer and Topcoat is higher at 8.2 lbs/gacs than the combined limit of 4.5 lbs/gacs.

VOC BACT Determination:

The BACT determined for the combined primer/ topcoat systems shall be as follows:

- (a) A combined system BACT emission limit of 4.5 pounds of VOC per gallon of applied coating solids (4.5 lbs/gacs).
- (b) Use of a regenerative thermal oxidizer (RTO) with destruction efficiency of 95% to control VOC emissions from the primer automatic zone, topcoat automatic zone (basecoat and clearcoat application) and primer and topcoat curing ovens;
- (c) Good work practices which includes the following:
 - (1) The use of robotic paint application system to minimize paint usage.
 - (2) The use of waterbased coatings where practical to maintain internal quality specifications.
 - (3) All paint mixing containers, other than day tanks equipped with continuous agitation systems, which contain organic VOC containing coatings and other materials shall have a cover with no visible gaps in place at all times except when material is being added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.
 - (4) Solvents sprayed during cleanup and color changes shall be directed into solvent collection containers.
 - (5) Solvent collection containers shall be kept closed when not in use.
 - (6) Clean-up rags with solvent shall be stored in closed containers.
 - (7) VOC emissions shall be minimized during cleaning of storage, mixing, and conveying equipment
 - (8) Minimization of major paint repair.