

**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES  
Air Pollution Control Program

## PART 70

# PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

**Operating Permit Number:** OP2017-089

**Expiration Date:** DEC 04 2022

**Installation ID:** 183-0076

**Project Number:** 2015-04-096

**Installation Name and Address**

General Motors LLC  
Wentzville Assembly Plant  
1500 East Route A  
Wentzville, MO 63385  
St. Charles County

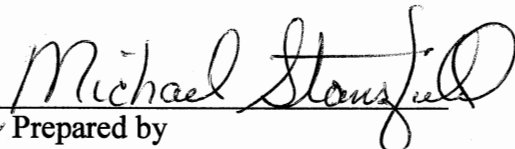
**Parent Company's Name and Address**

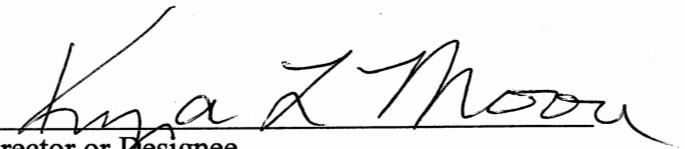
General Motors LLC  
300 Renaissance Center  
Detroit MI, 48265

**Installation Description:**

General Motors LLC - Wentzville Assembly (GM-Wentzville) is an automobile body fabrication and general assembly plant. Body fabrication processes include: stamping, welding, and surface coating. General assembly activities include body-trim assembly, body-chassis marriage, fluid filling, and final testing. The site also includes a powerhouse consisting of 3 natural gas-fired boilers supplying steam to the assembly plant.

GM-Wentzville is located in St. Charles County, a nonattainment area for the 8-hour ozone standard and the PM<sub>2.5</sub> standard and an attainment area for all other criteria pollutants. GM-Wentzville is a major source of nitrogen oxides, volatile organic compounds, carbon monoxide, hazardous air pollutants and Greenhouse Gases (CO<sub>2</sub>e)

for   
Prepared by  
Berhanu A. Getahun  
Operating Permit Unit

  
Director or Designee  
Department of Natural Resources

**DEC 04 2017**

Effective Date

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## I. Installation Equipment Listing

### EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EPN-1	Prime (ELPO) Coating System
EPN-2	Guidecoat (Primer Surfacer) System
EPN-3	Topcoat/Interior System
EPN-4	Final Process Repair System
EPN-5	Miscellaneous Sealers and Adhesive Operations
EPN-7	Miscellaneous Solvent Operations
EPN-8	Powerhouse Boilers
EG-1	Computer Room Emergency Generator
EG-2	Body Shop Emergency Generator
EG-3	Paint Emergency Generator
EG-4	Trim Emergency Generator
EG-5	Chassis Emergency Generator
EG-6	Powerhouse Emergency Generator
EG-7	A47 Fire Pump
EG-8	Powerhouse Fire Pump

### EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

#### Description of Emission Source

EPN-6 Process Materials Operations  
EPN-9 Assembly Plant Natural Gas Usage  
EPN-10 Stamping Operations  
20,000 Gallon Virgin Purge Thinner Tank  
10,000 Gallon Waste Purge Thinner Tank  
20,000 Gallon Diesel Tank  
20,000 Gallon Antifreeze Coolant Tank  
12,000 Gallon Windshield Washer Fluid tank  
20,000 Gallon Automatic Transmission Fluid Tank  
12,000 Gallon Power Steering Fluid Tank  
4,500 Gallon Oleum Tank  
750 Gallon Powerhouse Amine Tank  
Resistance Spot Welding and Metal Grinding Operations

Multi Stage Phosphate System (source1A016)

Vehicle Startup and Roll Test

Feather Duster (source 1A0170)

Wet/dry Sanding Booths (light duty assembly line)(source 1A018)

Spot Sanding and Painting (light duty assembly line) (source 1A020)

Fluorocarbon R-134A Storage Tank (source 1A029)

Sulfuric Acid Storage Tank (source 1A 030)

Miscellaneous chemical tanks emission source (1A032)

Caustic Storage Tank (1A034)

1234YF Refrigerant Tank

## II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Specific Limitations.

### Permit Condition PW001

10 CSR 10-6.060 Construction Permits Required  
Construction Permit No. 052012-009, Issued May 16, 2012

#### Emission Limitation:

- 1) Annual Emission Limitation – Plantwide Applicability Limitation (PAL)  
[Construction Permit 052012-009, Special Condition 3]
  - a) The permittee shall emit less than 1,002.5 tons of VOC from the emission units listed in Attachment A in any consecutive 12-month period. This will be known as the PAL Limit. Fugitive emissions and emissions associated with start-up, shutdown, and malfunction shall be counted towards this limit during the consecutive 12-month period.
  - b) The permittee shall use Attachment B, or an equivalent form that includes a determination of each emission unit's 12-month rolling VOC emissions total to be used to demonstrate compliance with the PAL Limit (Emission Limitation 1)a)). The permittee shall determine the monthly and consecutive 12-month VOC emissions from the emission units listed in Attachment A according to the following approved methods specified in the monitoring section of this permit condition. Failure to use an approved method will be a violation of this permit.
    - i) Mass balance calculations;
    - ii) Control Device calculations;
    - iii) Approved emission factors; and
    - iv) The procedures set forth in the EPA document AP-42, Fifth Edition, Volume I, Section 7.1 Organic Liquid Storage Tanks (November 2006), or the EPA software program entitled "TANKS"
  - c) General Motors LLC Wentzville Assembly Plant shall account for fugitive emissions and emissions associated with start-up, shutdown, and malfunction of VOC control systems using the mass balance calculation methods.
  - d) General Motors LLC Wentzville Assembly Plant shall complete the calculations required to show compliance with the PAL Limit no later than 30 days after the end of the month.
  - e) If at any time, General Motors LLC Wentzville Assembly Plant uses a capture and/or control device to comply with any applicable VOC emission limit, including but not limited to the PAL Limit, then General Motors LLC Wentzville Assembly Plant shall:
    - i) Use the VOC emission calculation procedures specified in the monitoring section of this permit condition "Control Device Calculations" for demonstrating compliance with the PAL Limit.
    - ii) Use the VOC emission calculation procedures specified in the monitoring section of this permit condition "Control Device Calculations" for the annual emissions reporting required by 10 CSR 10-6.110, *Submission of Emission Data, Emission Fees and Process Information*.

2) Emission Limitations for Pre-Approved Changes

[Construction Permit 052012-009, Special Condition 9]

- a) The permittee shall emit less than the following emission rates in any consecutive 12-month period from the pre-approved changes (i.e. the equipment that is newly constructed or modified under authority of Construction Permit 052012-009).

Table 3: Emission Limitations

Pollutant	Tons per year
Particulate Matter (PM)	25.0
Particulate Matter less than 10 microns in diameter (PM <sub>10</sub> )	15.0
Particulate Matter less than 2.5 microns in diameter (PM <sub>2.5</sub> )	10.0
Sulfur dioxide (SO <sub>2</sub> )	40.0
Nitrogen oxides (NO <sub>x</sub> )	40.0
Carbon monoxide (CO)	100.0
Lead (Pb)	0.60
Greenhouse Gases (GHGs)	75,000 <sup>[1]</sup>

<sup>1</sup>Units are tons carbon dioxide equivalents (CO<sub>2</sub>e) per year

- b) The permittee shall use Attachment C, or an equivalent form for demonstrating compliance with the emission limitations specified in Table 3.
- c) The permittee shall complete the calculations required by Emission Limitation 2)a) no later than 30 days after the end of the month.
- d) If the permittee uses a capture and/or control device to comply with the emission limitations specified in Table 3 then the permittee shall validate the capture efficiency and control efficiency through performance testing within 180 days after the initial use of the control equipment. A proposed test plan shall be submitted in accordance with the procedures outlined in Special Condition 8. of Construction Permit 052012-009 “Test Plan Procedures”.
- e) In order to use data from a representative source in lieu of the performance testing required by Emission Limitation 2)d) (i.e. data in lieu of testing), the permittee must adhere to the following requirements:
- i) The permittee must submit a request in writing to the Air Pollution Control Program’s New Source Review Unit, P.O. Box 176, Jefferson City, MO 65102 in order to waive the performance testing required by Emission Limitation 2)d).
  - ii) The request must include proposed capture and control efficiencies along with the supporting justification.
  - iii) The permittee may forego the performance testing and use the proposed capture and control efficiencies upon receipt of written approval from the Director.

3) HAP Requirements for Pre-Approved Changes

[Construction Permit 052012-009, Special Condition 10]

Pre-approved changes that are subject to a regulation under 40 CFR Part 63, *National Emission Standards for Hazardous Air Pollutants for Source Categories (a.k.a. Maximum Achievable Control Technology (MACT))*, have no additional compliance requirements. The following requirements apply only to pre-approved changes that are not subject to a regulation under 40 CFR Part 63.

- a) General Motors LLC Wentzville Assembly Plant shall demonstrate that the maximum ambient impact of HAP emissions from pre-approved changes is less than the Risk Assessment Level

according to the procedures specified in Monitoring 5) of this permit condition “Ambient Impact Analysis Procedures for Individual or Aggregate Group HAPs”. The Screening Model Action Level shall be obtained from the most recent revision of the Air Pollution Control Program's *Table of Hazardous Air Pollutants, Screening Model Action Levels, and Risk Assessment Levels*.

- b) In lieu of the modeling requirement specified above, General Motors LLC Wentzville Assembly Plant has the option to limit HAP emissions from pre-approved changes to less than the Screening Model Action Level for any consecutive 12-month period according to the following requirements:
  - i) General Motors LLC Wentzville Assembly Plant must submit a request in writing with the notification requirements outlined in Notification/Reporting section of this permit condition. “Notification of the Start of Construction or Modification”.
  - ii) General Motors LLC Wentzville Assembly Plant shall keep monthly emission calculations on hand demonstrating continuous compliance with this condition.

**Operational Limitation/Equipment Specifications:**

- 1) Authorized Construction/Operation of Pre-Approved Changes:  
[Construction Permit 052012-009, Special Condition 12]
  - a) The permittee is authorized to construct any of the pre-approved changes (i.e. the equipment that is newly constructed or modified under authority of this permit) during the PAL effective period without applying for or obtaining a construction permit or an amendment according to the following requirements:
    - i) The construction or modification shall be consistent with the authorized changes listed in Attachment D, Pre-Approved Changes.
    - ii) The construction or modification shall be recorded in Attachment A, or an equivalent form.
    - iii) Emissions of VOC associated with the construction or modification shall be subject to the requirements of Emission Limitation 1) of this permit condition. “Annual Emission Limitation - Plantwide Applicability Limitation (PAL)”
    - iv) All construction or modifications combined are subject to the emission limitations referenced in Table 3.
    - v) All construction or modifications shall meet the requirements of Emission Limitation 3) of this permit condition. “HAP Requirements for Pre-Approved Changes”.
  - b) The permittee is authorized to make like-kind replacements during the PAL effective period without applying for or obtaining a construction permit or an amendment according to the following requirements:
    - i) The replacement would qualify as a like-kind replacement according to 10 CSR 10-6.061, Construction Permits Exemptions.
    - ii) Like-kind replacements shall be recorded in Attachment A, or an equivalent form.
    - iii) Like-kind replacements shall be considered existing emission units for purposes of Attachment A.
    - iv) Emissions of VOC associated with like-kind replacements shall be subject to the requirements of Emission Limitation 1) of this permit condition. “Annual Emission Limitation - Plantwide Applicability Limitation (PAL)”
    - v) Like-kind replacements are not subject to the emission limitations referenced in Emission Limitation 2) of this permit condition. “Emission Limitations for Pre-Approved Changes” or the HAP requirements of Emission Limitation 3) of this permit condition. “HAP Requirements for Pre-Approved Changes”

- c) Permission to construct may be revoked if the Air Pollution Control Program determines that the construction or modification is not consistent with the authorized changes listed in Attachment D, Pre-Approved Changes.
  - d) Prior to the start of construction of any new emission unit or the modification of any existing emission unit that is deemed not consistent with the authorized changes listed in Attachment D, Pre-Approved Changes, the permittee shall apply for and obtain a construction permit or an amendment according to the requirements of 10 CSR 10-6.060, Construction Permits Required.
    - i) The permit review shall address only non-VOC emissions.
    - ii) VOC emissions shall be subject to the requirements of Special Condition 3. "Annual Emission Limitation - Plantwide Applicability Limitation (PAL)".
  - e) Failure to obtain a construction permit or an amendment for any construction or modification that is deemed not consistent with the authorized changes listed in Attachment D, Pre-Approved Changes, is a violation of 10 CSR 10-6.060, Construction Permits Required.
  - f) The permittee has the option to submit an application for an amendment to this construction permit in order to make additions or corrections to Attachment D, Pre-Approved Changes. The application must be submitted to the Air Pollution Control Program's New Source Review Unit, and the amendment must be issued prior to the start of construction.
- 2) PAL Effective Period [Construction Permit 052012-009, Special Condition 18]
- a) The PAL shall expire ten years following May 16, 2012, the PAL effective date.
  - b) The permittee shall submit a complete application for a new construction permit at least six months prior to, but no earlier than 18 months from, the expiration date of the PAL. The application shall follow the requirements of one of the following:
    - i) Expiration of a PAL as outlined in the Operational Limitation/Equipment Specifications 3) of this permit condition "Expiration of a PAL".
    - ii) Renewal of a PAL as outlined in Operational Limitation/Equipment Specifications 4) of this permit condition "Renewal of a PAL".
  - c) If an application is not received by the Air Pollution Control program according to the requirements of Operational Limitation/Equipment Specifications 2)b) of this permit condition, then the permittee will be required to submit an application for a new construction permit appropriate for the expiration of the PAL according to the requirements of Operational Limitation/Equipment Specifications 3) of this permit condition "Expiration of a PAL".
- 3) Expiration of a PAL [Construction Permit 052012-009, Special Condition 19]
- a) In order to terminate the PAL at the end of the PAL effective period, the permittee must submit a timely application in accordance with Operational Limitation/Equipment Specifications 2)b) of this permit condition for a new construction permit.
  - b) The application shall include a proposed allowable emission limitation for each emission unit, or each group of emission units, by distributing the PAL allowable emissions among each of the emission units that existed under the PAL. If the compliance date for an applicable State or Federal requirement occurred during the PAL effective period, and the PAL had not yet been adjusted, the distribution shall be made as if the PAL had been adjusted.
  - c) The Air Pollution Control Program shall decide how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emission unit, or each group of emission units, as the Air Pollution Control Program determines is appropriate. Each emission unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis.
  - d) Until the Air Pollution Control Program issues the revised permit incorporating the allowable limits for each emission unit:

- i) Emission Limitation 1) of this permit condition “Annual Emission Limitation - Plantwide Applicability Limitation (PAL)” shall remain in effect.
  - ii) The permittee shall cease construction of any Pre-Approved changes that have not begun operation during the PAL effective period.
  - e) Any physical change or change in the method of operation that occurred during the PAL effective period will be subject to the nonattainment major New Source Review (NSR) requirements if such change meets the definition of major modification for VOC.
  - f) The permittee shall continue to comply with any applicable State or Federal requirements that may have applied either during the PAL effective period or prior to the PAL effective period except for the emission limitations that are superseded in Special Condition 1 of Construction Permit 052012-009 “Superseding Condition”.
  - g) The PAL effective period shall expire on the expiration date and Operational Limitation/Equipment Specifications 1) of this permit condition “Authorized Construction/Operation of Pre-Approved Changes” will no longer be effective.
  - h) The non-VOC emission limits specified in Emission Limitation 2) of this permit condition . “Emission Limitations for Pre-Approved Changes” do not expire. The permittee shall continue to comply with the emission limits that apply to the equipment that was constructed or modified according to Operational Limitation/Equipment Specifications 1) of this permit condition, “Authorized Construction/Operation of Pre-Approved Changes”.
- 4) Renewal of a PAL [Construction Permit 052012-009, Special Condition 20]
- a) In order to renew the PAL at the end of the PAL effective period, the permittee must submit a timely application in accordance with Operational Limitation/Equipment Specifications 2)b) of this permit condition for a new construction permit. The application shall contain the following required elements:
    - i) A proposed PAL level;
    - ii) A list of all emission units with applicable Federal or State requirements;
    - iii) The potential emissions of all current equipment at the installation;
    - iv) Identification of the baseline period;
    - v) Baseline actual emissions; and
    - vi) A compliance plan for the proposed PAL.
  - b) The Air Pollution Control Program shall have the final authority to set the new PAL based on the following guidelines:
    - i) If the baseline actual emissions at the time of renewal are equal to or greater than 80 percent of the PAL, the PAL may be renewed at the same level.
    - ii) The PAL may not be set at a level that is greater than the potential to emit of the entire installation.
    - iii) The PAL shall be adjusted to account for any applicable State or Federal requirement with a compliance date that occurs during the effective period of this PAL.
    - iv) A PAL level higher than the current PAL level cannot be approved unless otherwise approved through Special Condition 21 of Construction Permit 052012-009 “Increase of the PAL during the Effective Period”
  - c) Any request to renew the PAL level is required to be placed on public notice for at least a 30-day period for submittal of public comment.
  - d) Emission Limitation 1) “Annual Emission Limitation - Plantwide Applicability Limitation (PAL)” shall remain in effect until a new permit has been issued to the permittee.

- i) The PAL effective period shall expire on the expiration date and Operational Limitation/Equipment Specifications 1) of this permit condition “Authorized Construction/Operation of Pre-Approved Changes” will no longer be effective.
    - ii) The permittee shall cease construction of any Pre-Approved changes that have not begun operation during the PAL effective period.
  - e) The non-VOC emission limits specified in Table 3 do not expire. The permittee shall continue to comply with the emission limits that apply to the equipment that was constructed or modified according to Operational Limitation/Equipment Specifications 1) of this permit condition “Authorized Construction/Operation of Pre-Approved Changes”. All pre-approved changes proposed for the PAL renewal shall be considered as part of the PAL renewal project and subject to the emission limits established during the PAL renewal.
- 5) Increase of the PAL during the Effective Period [Construction Permit 052012-009, Special Condition 21]
- a) In order to increase the PAL limit for a PAL major modification, the permittee must submit an application for a new construction permit requesting to increase the PAL limit according to the following requirements:
    - i) The application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the emissions to equal or exceed the PAL.
    - ii) The permittee shall determine the Best Available Control Technology (BACT) equivalent controls for each emission unit using current technology.
    - iii) The application must demonstrate that the sum of the baseline actual emissions of the small emission units, plus the sum of the baseline actual emissions of the significant and major emission units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions units exceeds the PAL.
      - (1) Small emission unit means an emission unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant emission rate for nonattainment areas.
      - (2) Significant emission unit means an emission unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the significant emission rate for nonattainment areas but less than the amount that would qualify the unit as a major emission unit.
      - (3) Major emission unit means any emission unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for nonattainment areas.
    - iv) These emission unit(s) identified by 5)a)i) above shall comply with any requirements resulting from the nonattainment major NSR program process (for example, LAER), even though they have also become subject to the PAL or continue to be subject to the PAL.
  - b) The increased PAL level shall be effective on the day any emission unit that is part of the PAL major modification becomes operational and begins to emit VOC.
  - c) Any request to increase the PAL level is required to be placed on public notice for at least a 30-day period for submittal of public comment.
- 6) Reopening of the PAL [Construction Permit 052012-009, Special Condition 22]
- The Air Pollution Control Program may reopen this construction permit to reduce the PAL for the following reasons:
- a) To account for any applicable State or Federal requirement with a compliance date that occurs during the effective period of this PAL permit.

- b) To avoid causing or contributing to a National Ambient Air Quality Standard (NAAQS) or Prevention of Significant Deterioration (PSD) increment violation, or to an adverse impact on air quality in a Class I area.

**Monitoring:**

- 1) In order to ensure continuous compliance with the PAL limit, the permittee shall estimate emissions according to the following requirements.
  - a) Emission estimates shall begin no later than 30 days after the end of the month where the PAL Limit demonstration indicates that emissions surpass 897.8 tons VOC.
  - b) Emission estimates may be discontinued when the PAL Limit demonstration indicates that emissions have been less than 897.8 tons VOC for three consecutive months.
  - c) Emission estimates shall be calculated for the current calendar month by multiplying the projected number of vehicles produced during the current month times the pounds VOC emitted per vehicle.
  - d) Emission estimates shall be calculated for the following calendar month by multiplying the projected number of vehicles produced during the following month times the pounds VOC emitted per vehicle.
  - e) The pounds VOC emitted per vehicle shall be determined by the permittee using representative data. The permittee shall keep records that indicate how this value was determined.
  - f) The emission estimate for the current month's 12-month rolling total shall be calculated by summing the actual emissions determined for the previous 11 months according to Attachment B, or equivalent form, plus the emission estimate for the current calendar month determined according to Monitoring 1)c). A summary of the calculation follows:

$$\left( \begin{array}{c} \text{emission estimate} \\ \text{of the current month's} \\ \text{12-month rolling total} \end{array} \right) = \left( \begin{array}{c} \text{actual emissions} \\ \text{for the previous} \\ \text{11 months} \end{array} \right) + \left( \begin{array}{c} \text{current} \\ \text{month's} \\ \text{emission} \\ \text{estimate} \end{array} \right)$$

- g) The emission estimate for the following month's 12-month rolling total shall be calculated by summing the actual emissions determined for the previous ten months according to Attachment B, or equivalent form, plus the emission estimate for the current calendar month determined according to Monitoring 1)c) plus the emission estimate for the following calendar month determined according to Monitoring 1)d). A summary of the calculation follows:

$$\left( \begin{array}{c} \text{emission estimate} \\ \text{of the following} \\ \text{month's 12-month} \\ \text{rolling total} \end{array} \right) = \left( \begin{array}{c} \text{actual emissions} \\ \text{for the previous} \\ \text{10 months} \end{array} \right) + \left( \begin{array}{c} \text{current} \\ \text{month's} \\ \text{emission} \\ \text{estimate} \end{array} \right) + \left( \begin{array}{c} \text{following} \\ \text{month's} \\ \text{emission} \\ \text{estimate} \end{array} \right)$$

- h) Emission estimates shall be subject to the recordkeeping requirements of Recordkeeping 4) 5) 6) and 7) of this permit condition.
  - i) If the records required by Emission Limitation 1)b) demonstrate an exceedance of the PAL Limit, then the emission estimates recorded for the previous 12-month period shall be submitted with the Deviation Report required by Notification/Reporting 3)b) of this permit condition.
- 2) Mass Balance Calculations: [Construction Permit 052012-009, Special Condition 4]  
When required by Emission Limitation 1) "Annual Emission Limitation - Plantwide Applicability

Limitation (PAL)" to use the VOC mass balance method, the permittee shall determine the VOC emissions from activities using coatings or solvents according to the following requirements:

- a) The permittee shall obtain the VOC content of all coatings or solvents according to the following approved methods. The Director reserves the right to require the permittee to determine the VOC contents of any material according to U.S. EPA reference methods.
    - i) Material Safety Data Sheet (MSDS) Note: Where the vendor of a material, publishes a range of VOC content, the permittee shall use the highest value of the range to calculate the VOC emissions.
    - ii) Laboratory test data.
  - b) The amount of VOC recovered from material shipped off-site, such as hazardous waste, solvent recovery, or fuel blending, shall be calculated as the mass of material shipped off-site times the VOC content of the material. The VOC content of material shipped off-site is the weighted average of the VOC content of all shipments made during a one-month block time period. The permittee shall verify the VOC content of each shipment according to U.S. EPA reference methods.
  - c) The amount of VOC emitted according to the mass balance method shall be calculated as the total mass of VOC containing materials used times the respective VOC content. The amount of VOC recovered shall be subtracted from this amount.  
[Construction Permit 052012-009, Special Condition 4.C]
- 3) Control Device Calculations: [Construction Permit 052012-009, Special Condition 5]  
When the permittee uses a control device to meet any emission limit, including but not limited to the PAL Limit, the permittee shall calculate the VOC emissions according to the procedures outlined below.
- a) For Primer-Surfacer and Topcoat Operations, the permittee shall use the procedures set forth in the Auto Protocol (EPA-453/R-08-002) entitled, Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer- Surfacers and Topcoat Operations, (September 2008). An example of the Auto Protocol calculation method is provided in Attachment E. This example is intended to summarize the Auto Protocol procedures. Any differences between the example and the Auto Protocol method are unintentional, and if differences exist then the Auto Protocol shall take precedence.
    - i) The permittee shall determine the transfer efficiency according to the procedures outlined in the Auto Protocol, Section 18, "Transfer Efficiency Test Procedure – In Plant".
    - ii) The permittee shall determine the oven solvent loading according to the procedures outlined in the Auto Protocol, Section 23, "Test Procedures for Determining Exhaust Control Device VOC Loading (Capture Efficiency) by Stack Test per EPA Method 204 or Alternative Methods".
    - iii) The permittee shall determine the destruction efficiency according to the procedures outlined in the Auto Protocol, Section 22, "Test Procedures for Determining Oxidizer or Concentrator Control Device Efficiency".
    - iv) The permittee shall validate the transfer efficiency, oven solvent loading, and control device efficiency according to the procedures set forth in the Performance Testing Requirements 3) of this permit condition.
  - b) For all other operations, the permittee shall account for the use of a VOC control device according to the following formula:

$$\left( \text{VOC}_{\text{emissions}} \right) = \left( \text{VOC}_{\text{generated}} \right) \times \left( 1 - \left( \text{capture efficiency} \right) \times \left( \text{control efficiency} \right) \right)$$

- i) The permittee shall determine the VOC generated according to the procedures outlined in Special Condition 4.” Mass Balance Calculations”.
- ii) The permittee shall validate the capture efficiency and control efficiency according to the procedures set forth in the Performance Testing Requirements 3) of this permit condition.
- iii) In order to use data from a representative source in lieu of the performance testing required by Monitoring 3)b)ii) of this permit condition (i.e. data in lieu of testing), the permittee must adhere to the following requirements:
  - (1) The permittee must submit a request in writing to the Air Pollution Control Program’s New Source Review Unit, P.O. Box 176, Jefferson City, MO 65102 in order to waive the performance testing required by Monitoring 3)b)ii) of this permit condition.
  - (2) The request must include proposed capture and control efficiencies along with the supporting justification.
  - (3) The permittee may forego the performance testing and use the proposed capture and control efficiencies upon receipt of written approval from the Director.
- 4) Approved Emission Factors [Construction Permit 052012-009, Special Condition 6]
  - a) The permittee shall use the following emission factors to determine VOC emissions from existing emission units:

Table 1: Approved Emission Factors for Existing Emission Units

Emission Unit Type	Emission Factor	Units	SCC
Natural Gas Combustion (Boiler)	5.5	pounds VOC per million cubic feet natural gas burned	1-02-006-01
Natural Gas Combustion (Process Equipment)	5.5	pounds VOC per million cubic feet natural gas burned	1-02-006-03

SCC= Emission Factor Source Classification Code

- b) The permittee shall use the following emission factors to determine VOC emissions from pre-approved changes:

Table: 2 Approved Emission Factors for Pre-Approved Changes

Pre-Approved Change Category	Emission Unit Type	Emission Factor	Units	SCC
47	Natural Gas Combustion (Boiler)	5.5	pounds VOC per million cubic feet natural gas burned	1-02-006-01
47	Fuel Oil Combustion (Boiler)	0.2	pounds VOC per thousand gallons fuel oil burned	1-02-005-01
47	Propane Combustion (Boiler)	1.0	pounds VOC per thousand gallons propane burned	1-02-010-02
1,6,7,9,10,13,14, 17,19,22,24,28 31,33,34,37,38 39,40,52,53	Natural Gas Combustion (Process Equipment)	5.5	pounds VOC per million cubic feet natural gas burned	1-02-006-03

1,6,7,9,10,13,14 17,19,22,24,28 31,33,34,37,38 39,40,52,53	Propane Combustion (Process Equipment)	1.0	pounds VOC per thousand gallons propane burned	1-02-010-02
54	Natural Gas Combustion (Engine)	0.12	pounds VOC per million Btu	2-02-002-52
54	Fuel Oil Combustion (Engine)	0.35	pounds VOC per million Btu	2-03-001-01
54	Gasoline Combustion (Engine)	2.10	pounds VOC per million Btu	2-03-003-01

SCC= Emission Factor Source Classification Code

- c) The permittee has the option to submit an application for an amendment to this construction permit in order to make additions or corrections to Table: 2 "Approved Emission Factors for Pre-Approved Changes". The application must be submitted to the Air Pollution Control Program's New Source Review Unit, and the amendment must be issued, prior to the use of the emission factor.
- 5) Ambient Impact Analysis Procedures for Individual or Aggregate Group HAPs  
[Construction Permit 052012-009, Special Condition 11]
  - a) The permittee shall follow the modeling guidelines set forth in 40 CFR Part 51 Appendix W, "Guideline on Air Quality Models" using either the recommended screening model or the recommended refined model.
  - b) The permittee shall prepare and submit a modeling protocol to the Air Pollution Control Program's New Source Review Unit for approval prior to the execution of the ambient air quality impact analysis.
  - c) The emission rates used in the model shall be based upon the potential to emit of the individual or aggregate group HAP from all emission units at the site (i.e. including the proposed changes and each new, modified, and existing emission unit listed on Attachment A, or an equivalent form).
    - i) For Individual HAPs, the emission rate shall be the total mass of the compound.
    - ii) For Aggregate Group HAPs, the emission rate shall be consistent with the guidance set forth in the most recent revision of the Air Pollution Control Program's Table of Hazardous Air Pollutants, Screening Model Action Levels, and Risk Assessment Levels.
  - d) The Risk Assessment Levels shall be obtained from the most recent revision of the Air Pollution Control Program's Table of Hazardous Air Pollutants, Screening Model Action Levels, and Risk Assessment Levels.
  - e) If the maximum ambient impacts are less than the Risk Assessment Levels, then the permittee shall prepare a modeling report containing sufficient detail to verify compliance with the Risk Assessment Levels. This report shall be submitted with the notification requirements outlined in Special Condition 13. "Notification of the Start of Construction or Modification". [Construction Permit 052012-009, Special Condition 11.E]
  - f) If the maximum ambient impact is greater than the Risk Assessment Level, then the permittee shall apply for and obtain a construction permit according to the requirements of 10 CSR 10-6.060, Construction Permits Required.  
[Construction Permit 052012-009, Special Condition 11.F]
    - i) The permit review shall address only non-VOC emissions
    - ii) VOC emissions shall be subject to the requirements of Emission Limitation 1) "Annual Emission Limitation - Plantwide Applicability Limitation (PAL)"

- iii) The construction permit shall apply restrictions (such as emission rate limits or control device requirements) that achieve sufficient emission reductions to reduce the maximum ambient impact to less than the Risk Assessment Level.

**Performance Testing Requirements:**

- 1) All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Air Pollution Control Program. Such testing must occur at least once every five years after permit issuance.  
[Construction Permit 052012-009, Special Condition 3.I]
- 2) Subsequent to Construction Permit 052012-009 issuance, if the permittee uses a capture and/or control device to comply with any applicable VOC emission limit during the PAL effective period, including but not limited to the PAL Limit, then the permittee shall validate the capture efficiency and control efficiency through performance testing according to the following requirements:  
[Construction Permit 052012-009, Special Condition 7]
  - a) Each capture and control efficiency shall be re-validated through performance testing at least once every 5 years.
  - b) A proposed test plan shall be submitted in accordance with the procedures outlined in Special Condition 8 of Construction Permit 052012-009. "Test Plan Procedures".

**Recordkeeping:**

- 1) Attachment A, or an equivalent form, shall contain a list of all existing, new, and modified emission units located at the installation during the PAL effective period. The list must be current in order to account for all emission units present at the installation at any given time. The list shall contain at a minimum a description of each existing, new, or modified emission unit, the date construction commenced of each new or modified unit, the date operation began of each new or modified unit, the date existing equipment is removed, and all applicable federal and state regulations. (Note: If an existing emission unit is modified, then the date of removal of the existing emission unit shall be the date that construction of the modification commences.)  
[Construction Permit 052012-009, Special Condition 3.F]
- 2) The permittee shall keep documentation sufficient to support all emission calculations required for the PAL Limit compliance demonstration for not less than five years.  
[Construction Permit 052012-009, Special Condition 3.G]
- 3) The permittee shall maintain accuracy of all data used to establish the PAL pollutant according to the Quality Assurance and Quality Control plan required by Special Condition 17 of Construction Permit 052012-009 "Quality Assurance and Quality Control Plan".  
[Construction Permit 052012-009, Special Condition 3.H]
- 4) The permittee shall maintain all records required by this permit for not less than five years. These records shall include Safety Data Sheets (SDS) for all materials used.  
[Construction Permit 052012-009, Special Condition 15.A]
- 5) The permittee shall maintain a copy of the PAL permit application and any applications for revisions to the PAL for the duration of the PAL effective period plus five years.  
[Construction Permit 052012-009, Special Condition 15.B]
- 6) The permittee shall maintain a copy of each annual certification of compliance pursuant to Title V and the data relied on in certifying compliance for the duration of the PAL effective period plus five years. [Construction Permit 052012-009, Special Condition 15.C]
- 7) The permittee shall keep all records required by this permit on-site and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.  
[Construction Permit 052012-009, Special Condition 15.D]

**Notification/Reporting:**

- 1) Notification of the Start of Construction or Modification:  
[Construction Permit 052012-009, Special Condition 13]
  - a) The permittee shall submit written notification to the Air Pollution Control Program's New Source Review Unit and the St. Louis Regional Office no less than ten days prior to the start of any construction or modification meeting the requirements of Operational Limitation/Equipment Specifications 1)a) of this permit condition. The notification shall contain the following:
    - i) A detailed description of the construction or modification including the effects on the emissions of any existing emission unit that will not be physically changed;
    - ii) A plant layout diagram with representation of the existing equipment and the new construction or modification;
    - iii) A schedule of construction activities;
    - iv) A statement of applicability of any New Source Performance Standard, National Emissions Standard of Hazardous Air Pollutants and/or state regulations not identified as core requirements in the operating permit;
    - v) A calculation sheet detailing the expected actual emissions of all pollutants for each emission unit affected by the construction or modification;
    - vi) A statement of verification that the construction or modification will not result in actual emissions exceeding the limitations referenced in Emission Limitation 1) of this permit condition. "Annual Emission Limitation - Plantwide Applicability Limitation (PAL)" and 2." Emission Limitations for Pre-Approved Changes";
    - vii) Any modeling reports required to demonstrate compliance with Emission Limitation 3)a) of this permit condition; and
    - viii) Any request to limit HAP emissions below the Screening Model Action Level in accordance with Emission Limitation 3)6) of this permit condition.
  - b) This notification shall become an enforceable part of this construction permit upon receipt by the Air Pollution Control Program.
- 2) Notification of the Start of Operation: [Construction Permit 052012-009, Special Condition 14]

The permittee shall submit written notification to the Air Pollution Control Program's New Source Review Unit and the St. Louis Regional Office no less than ten days prior to the start of operation of any construction or modification meeting the requirements of Operational Limitation/Equipment Specifications 1)a) of this permit condition. The notification shall contain the following:

  - a) Reference to the notification pertaining to the start of construction or modification; including the date of the notification and a brief description of the change;
  - b) Verification that the construction or modification was completed as described in the original notification; and
  - c) Scheduled date for the start of operation.
- 3) Reporting Requirements: [Construction Permit 052012-009, Special Condition 16]
  - a) The permittee shall submit a semi-annual emissions report to the Air Pollution Control Program, Compliance and Enforcement Section, no later than 30 days after the end of each reporting period. The reporting periods are January 1 - June 30 and July 1 – December 31. The report shall contain the following information:
    - i) Specification of the site;
    - ii) Identification of the owner and operator;
    - iii) The permit number and the project number;
    - iv) A copy of Attachment A, or an equivalent form, including at a minimum a list of any emission units modified or added to the installation during the preceding 6-month period;

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- v) A copy of Attachment B, or an equivalent form, including at a minimum the total annual emissions in tons per year based on a 12-month rolling total for each month in the reporting period (or for all prior months if the PAL has not been in effect for a full 12 months);
  - vi) A statement indicating compliance with the PAL;
  - vii) A summary of all data relied upon in calculating the monthly and annual VOC emissions as well as the method of emissions calculations including formulas, emission factors, and capture and control efficiencies;
  - viii) The number, duration, and cause of any deviations or control device malfunctions, and any corrective actions taken;
  - ix) Information relating to the shutdown of any VOC control system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the control system will be fully operational or replaced with another system, and whether the emissions unit controlled by the VOC control system continued to operate during the shutdown, and the method that was used to calculate emissions during the shutdown;
  - x) A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.
- b) The permittee shall submit a deviation report to the Air Pollution Control Program, Compliance and Enforcement Section no later than 30 days after any deviations or exceedance of permitting requirements. A deviation reported under Condition 10 CSR 10-6.065(6)(C).C General Record Keeping and Reporting Requirements 2)e) of the General Conditions meets the reporting requirements under this condition as long as the deviation report contains the following information: The deviation report shall contain the following information:
- i) Specification of the site;
  - ii) Identification of the owner and operator;
  - iii) The permit number and the project number;
  - iv) The permit requirement that experienced the deviation or that was exceeded;
  - v) Emissions resulting from the deviation or the exceedance; and
  - vi) A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

<b>EPN-1 through EPN-5 — Surface Coating Operations</b>	
ELPO oven (EPN-1), primer surfacer oven (EPN-2), and the topcoat ovens (EPN-3) are all equipped with capture systems (oven air seals) and control devices (catalytic oxidizers)	
Emission Unit	Description
EPN-1	Prime (ELPO) Coating System - Cathodic Electro-deposition coating with incineration on oven. Prime (ELPO) dip tanks and Oven
EPN-2	Guidecoat (Primer Surfacer) System – with 2- VOC Concentrators and 1- Regenerative Thermal Oxidizer (RTO) Guidecoat (Primer Surfacer) booth and Oven
EPN-3	Topcoat/Interior System – with 2 Heated Flash RTOs Interior booth, Color #1 booth/flash/oven, Color #2 booth/flash/oven and Spot Repair
EPN-4	Final Process Repair System Final process spot repair booths
EPN-5	Miscellaneous Sealers and Adhesive Operations Deadener booth, Glass Primer, Transit Coating Application, B/S Weld-thru Sealer, Body Sealer/oven, Robotic Glass Sealer, multiple location activities
EPN-7	Miscellaneous Solvent Operations Purge solvents are used to clean the paint lines in order to prepare the lines for a color change and to clean the applicators

<b>Permit Condition (EPN-1 through EPN-5) - 001</b>
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart IIII National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

#### **Emission Limitation:**

- 1) The permittee shall meet the requirements of either §63.3092(a) or (b) specified below to use the compliance method specified in section §63.3091 (b): [§63.3092]
  - a) Each individual material added to the electrodeposition primer system contains no more than: [§63.3092(a)]
    - i) 1.0 percent by weight of any organic HAP; and
    - ii) 0.10 percent by weight of any organic HAP which is an Occupational Safety and Health Administration (OSHA)-defined carcinogen as specified in 29 CFR 1910.1200(d)(4).
  - b) Emissions from all bake ovens used to cure electrodeposition primers must be captured and ducted to a control device having a destruction efficiency of at least 95 percent. [§63.3092(b)]
- 2) If the permittee meets the operating limits of §63.3092(a) or (b) (Condition 1), the permittee must limit combined organic HAP emissions to the atmosphere from primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except

for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) to no more than 0.132 kg/liter (1.10 lb/gal) of coating solids deposited during each month, determined according to the requirements in §63.3171. [§63.3091(b)]

- 3) The Permittee must limit average organic HAP emissions from all adhesive and sealer materials other than materials used as components of glass bonding systems to no more than 0.010 kg/kg (lb/lb) of adhesive and sealer material used during each month. [§63.3091(c)]
- 4) The permittee must limit average organic HAP emissions from all deadener materials to no more than 0.010 kg/kg (lb/lb) of deadener material used during each month. [§63.3091(d)]
- 5) For coatings and thinners used in coating operations added to the affected source pursuant to §63.3082(c): [§63.3091(e)]
  - a) Adhesive and sealer materials that are not components of glass bonding systems are subject to and must be included in the permittee's demonstration of compliance for §63.3091(c) (Condition 3). [§63.3091(e)(1)]
  - b) Deadener materials are subject to and must be included in the permittee's demonstration of compliance for §63.3091(d) (Condition 4). [§63.3091(e)(2)]
  - c) All other coatings and thinners are subject to and must be included in the permittee's demonstration of compliance for §63.3091(b) (Condition 2). [§63.3091(e)(3)]
- 6) If the facility has multiple paint lines ( e.g., two or more totally distinct paint lines each serving a distinct assembly line, or with two or more paint lines sharing the same paint kitchen or mix room), then for the operations addressed in §63.3091(b) (Condition 2): [§63.3091(f)]
  - a) The permittee may choose to use a single grouping under §63.3091(b) (Condition 2) for all of primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations, as long as each of the electrodeposition primer systems meets the operating limits of §63.3092(a) (Condition 1). [§63.3091(f)(2)]
  - b) The permittee may choose to consider the electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations from each of the paint lines as a separate grouping under either §63.3091(b) (Condition 2). The electrodeposition primer system associated with each paint line the permittee chooses to consider in a grouping under §63.3091(b) (Condition 2) must meet the operating limits of §63.3092(a) (Condition 1). [§63.3091(f)(4)]

**Operation Limitation and Work Practices:**

- 1) Operational Limitation:
  - a) The permittee is not required to meet any operating limits for any coating operation(s) without add-on controls. [§63.3093(a)] (*NOTE: Add-on controls are any controls on the coating operation that are essential to meeting the emission limitations of this rule.*)
  - b) If the permittee uses an add-on control device other than those listed in Table 1 to Subpart III of Part 63, or wish to monitor an alternative parameter and comply with a different operating limit, the permittee must apply to the Director for approval of alternative monitoring under §63.8(f). [§63.3093(d)]
- 2) Work Practices:
  - a) The permittee must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, all coating operations for which emission limits are established under §63.3091(a) through (d). The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in §63.3094(b)(1) through (5) are implemented. [§63.3094(b)]

- i) All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be stored in closed containers. [§63.3094(b)(1)]
- ii) The risk of spills of organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be minimized. [§63.3094(b)(2)]
- iii) Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes. [§63.3094(b)(3)]
- iv) Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents. [§63.3094(b)(4)]
- v) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment. [§63.3094(b)(5)]
- b) The permittee must develop and implement a work practice plan to minimize organic HAP emissions from cleaning and from purging of equipment associated with all coating operations for which emission limits are established under §63.3091(a) through (d). [§63.3094(c)]
  - i) The plan shall, at a minimum, address each of the operations listed in §63.3094(c)(1)(i) through (viii) in which the permittee use organic-HAP-containing materials or in which there is a potential for emission of organic HAP. [§63.3094(c)(1)]
    - (1) The plan must address vehicle body wipe emissions through one or more of the techniques listed in §63.3094(c)(1)(i)(A) through (E), or an approved alternative. [§63.3094(c)(1)(i)]
      - (a) Use of solvent-moistened wipes. [§63.3094(c)(1)(i)(A)]
      - (b) Keeping solvent containers closed when not in use. [§63.3094(c)(1)(i)(B)]
      - (c) Keeping wipe disposal/recovery containers closed when not in use. [§63.3094(c)(1)(i)(C)]
      - (d) Use of tack-wipes. [§63.3094(c)(1)(i)(D)]
      - (e) Use of solvents containing less than 1 percent organic HAP by weight. [§63.3094(c)(1)(i)(E)]
    - (2) The plan must address coating line purging emissions through one or more of the techniques listed in §63.3094(c)(1)(ii)(A) through (D), or an approved alternative. [§63.3094(c)(1)(ii)]
      - (a) Air/solvent push-out. [§63.3094(c)(1)(ii)(A)]
      - (b) Capture and reclaim or recovery of purge materials (excluding applicator nozzles/tips). [§63.3094(c)(1)(ii)(B)]
      - (c) Block painting to the maximum extent feasible. [§63.3094(c)(1)(ii)(C)]
      - (d) Use of low-HAP or no-HAP solvents for purge. [§63.3094(c)(1)(ii)(D)]
    - (3) The plan must address emissions from flushing of coating systems through one or more of the techniques listed in paragraphs §63.3094(c)(1)(iii)(A) through (D), or an approved alternative. [§63.3094(c)(1)(iii)]
      - (a) Keeping solvent tanks closed. [§63.3094(c)(1)(iii)(A)]
      - (b) Recovering and recycling solvents. [§63.3094(c)(1)(iii)(B)]
      - (c) Keeping recovered/recycled solvent tanks closed. [§63.3094(c)(1)(iii)(C)]
      - (d) Use of low-HAP or no-HAP solvents. [§63.3094(c)(1)(iii)(D)]
    - (4) The plan must address emissions from cleaning of spray booth grates through one or more of the techniques listed in paragraphs §63.3094(c)(1)(iv)(A) through (E), or an approved alternative. [§63.3094(c)(1)(iv)]
      - (a) Controlled burn-off. [§63.3094(c)(1)(iv)(A)]
      - (b) Rinsing with high-pressure water (in place). [§63.3094(c)(1)(iv)(B)]

- (c) Rinsing with high-pressure water (off line). [§63.3094(c)(1)(iv)(C)]
- (d) Use of spray-on masking or other type of liquid masking. [§63.3094(c)(1)(iv)(D)]
- (e) Use of low-HAP or no-HAP content cleaners. [§63.3094(c)(1)(iv)(E)]
- (5) The plan must address emissions from cleaning of spray booth walls through one or more of the techniques listed in paragraphs §63.3094(c)(1)(v)(A) through (E), or an approved alternative. [§63.3094(c)(1)(v)]
  - (a) Use of masking materials (contact paper, plastic sheet, or other similar type of material). [§63.3094(c)(1)(v)(A)]
  - (b) Use of spray-on masking. [§63.3094(c)(1)(v)(B)]
  - (c) Use of rags and manual wipes instead of spray application when cleaning walls. [§63.3094(c)(1)(v)(C)]
  - (d) Use of low-HAP or no-HAP content cleaners. [§63.3094(c)(1)(v)(D)]
  - (e) Controlled access to cleaning solvents. [§63.3094(c)(1)(v)(E)]
- (6) The plan must address emissions from cleaning of spray booth equipment through one or more of the techniques listed in §63.3094(c)(1)(vi)(A) through (E), or an approved alternative. [§63.3094(c)(1)(vi)]
  - (a) Use of covers on equipment (disposable or reusable). [§63.3094(c)(1)(vi)(A)]
  - (b) Use of parts cleaners (off-line submersion cleaning). [§63.3094(c)(1)(vi)(B)]
  - (c) Use of spray-on masking or other protective coatings. [§63.3094(c)(1)(vi)(C)]
  - (d) Use of low-HAP or no-HAP content cleaners. [§63.3094(c)(1)(vi)(D)]
  - (e) Controlled access to cleaning solvents. [§63.3094(c)(1)(vi)(E)]
- (7) The plan must address emissions from cleaning of external spray booth areas through one or more of the techniques listed in §63.3094(c)(1)(vii)(A) through (F), or an approved alternative. [§63.3094(c)(1)(vii)]
  - (a) Use of removable floor coverings (paper, foil, plastic, or similar type of material). [§63.3094(c)(1)(vii)(A)]
  - (b) Use of manual and/or mechanical scrubbers, rags, or wipes instead of spray application. [§63.3094(c)(1)(vii)(B)]
  - (c) Use of shoe cleaners to eliminate coating track-out from spray booths. [§63.3094(c)(1)(vii)(C)]
  - (d) Use of booties or shoe wraps. [§63.3094(c)(1)(vii)(D)]
  - (e) Use of low-HAP or no-HAP content cleaners. [§63.3094(c)(1)(vii)(E)]
  - (f) Controlled access to cleaning solvents. [§63.3094(c)(1)(vii)(F)]
- (8) The plan must address emissions from housekeeping measures not addressed in §63.3094(c)(1)(i) through (vii) through one or more of the techniques listed in §63.3094(c)(1)(viii)(A) through (C), or an approved alternative. [§63.3094(c)(1)(viii)]
  - (a) Keeping solvent-laden articles (cloths, paper, plastic, rags, wipes, and similar items) in covered containers when not in use. [§63.3094(c)(1)(viii)(A)]
  - (b) Storing new and used solvents in closed containers. [§63.3094(c)(1)(viii)(B)]
  - (c) Transferring of solvents in a manner to minimize the risk of spills. [§63.3094(c)(1)(viii)(C)]
- ii) Notwithstanding the requirements of §63.3094(c)(1)(i) through (viii), if the type of coatings used in any facility with surface coating operations subject to the requirements of this section are of such a nature that the need for one or more of the practices specified under §63.3094(c)(1)(i) through (viii) is eliminated, then the plan may include approved alternative or equivalent measures that are applicable or necessary during cleaning of storage, conveying, and application equipment. [§63.3094(c)(2)]

- c) As provided in §63.6(g), the Missouri Department of Natural Resources, may choose to grant the permittee permission to use an alternative to the work practice standards in this section. [§63.3094(d)]
- d) The work practice plans developed in accordance with §63.3094(b) and (c) are not required to be incorporated into this operating permit. Any revisions to the work practice plans developed in accordance with §63.3094(b) and (c) do not constitute revisions to this operating permit. [§63.3094(e)]

**Compliance Requirements:**

- 1) General:
  - a) The permittee must be in compliance with the emission limitations in §63.3091 at all times, as determined on a monthly basis. [§63.3100(a)]
  - b) The permittee must be in compliance with the work practice standards in §63.3094 at all times. [§63.3100(c)]
  - c) The permittee must always operate and maintain the affected source including all air pollution control and monitoring equipment the permittee uses for purposes of complying with this subpart according to the provisions in §63.6(e)(1)(i). [§63.3100(d)]
- 2) Continuous Compliance:
  - a) To demonstrate continuous compliance, the mass average organic HAP content for each compliance period, determined according to §63.3151(a) through (d), must be less than or equal to the applicable emission limit in §63.3091(c) and (d). A compliance period consists of 1 month. Each month after the end of the initial compliance period described in §63.3150 is a compliance period consisting of that month. [§63.3152(a)]
  - b) If the mass average organic HAP emission content for any compliance period exceeds the applicable emission limit in §63.3091(c) and (d), this is a deviation from the emission limitations for that compliance period and must be reported as specified in §§63.3110(c)(6) and 63.3120(a)(5). [§63.3152(b)]
  - c) The permittee must demonstrate continuous compliance with the work practice standards in §63.3094. If the permittee did not develop a work practice plan, if the permittee did not implement the plan, or if the permittee did not keep the records required by §63.3130(n), this is a deviation from the work practice standards that must be reported as specified in §§63.3110(c)(6) and 63.3120(a)(6). [§63.3163(e)]
  - d) To demonstrate continuous compliance with the applicable emission limit in §63.3091(b), the organic HAP emission rate for each compliance period determined according to the procedures in §63.3171 must be equal to or less than the applicable emission limit in §63.3091(b). A compliance period consists of 1 month. Each month after the end of the initial compliance period described in §63.3170 is a compliance period consisting of that month. The permittee must perform the calculations in §63.3171 on a monthly basis. [§63.3173(a)]
  - e) If the organic HAP emission rate for any 1 month compliance period exceeded the applicable emission limit in §63.3091(b), this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.3110(c)(6) and 63.3120(a)(6). [§63.3173(b)]
  - f) The permittee must maintain records as specified in §§63.3130 and 63.3131. [§§63.3152(c), 63.3163(j)]

**Recordkeeping:**

- 1) The permittee must collect and keep records of the data and information specified in §63.3130 as stated below. Failure to collect and keep these records is a deviation from the applicable standard. [§63.3130]
  - a) A copy of each notification and report that the permittee submitted to comply with this subpart, and the documentation supporting each notification and report. [§63.3130(a)]
  - b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP, the density and the volume fraction of coating solids for each coating, the mass fraction of organic HAP and the density for each thinner, and the mass fraction of organic HAP for each cleaning material. If the permittee conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee must keep a copy of the complete test report. If the permittee uses information provided to the permittee by the manufacturer or supplier of the material that was based on testing, the permittee must keep the summary sheet of results provided to the permittee by the manufacturer or supplier. If the permittee uses the results of an analysis conducted by an outside testing lab, the permittee must keep a copy of the test report. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier. [§63.3130(b)]
  - c) The permittee shall maintain records for each month, the records specified in §63.3130(c)(1) through (3) and §3130(c)(5) through (6). [§63.3130(c)]
    - i) For each coating used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations and for each coating, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c), a record of the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids. [§63.3130(c)(1)]
    - ii) For each thinner used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations and for each thinner, except for thinner used for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c), a record of the volume used in each month, the mass fraction organic HAP content, and the density. [§63.3130(c)(2)]
    - iii) For each deadener material and for each adhesive and sealer material, a record of the mass used in each month and the mass organic HAP content. [§63.3130(c)(3)]
    - iv) A record of the calculation of the organic HAP emission rate for primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) for each month if subject to the emission limit §63.3091(b), and a record of the weight fraction of each organic HAP in each material added to the electrodeposition primer system if subject to the limitations of §63.3092(a). This record must include all raw data, algorithms, and intermediate calculations. If the guidelines presented in the "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22), are used, the permittee must keep records of all data input to this protocol. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. These data must be provided to the permitting

authority on request on paper, and in (if calculations are done electronically) electronic form. [§63.3130(c)(5)]

- v) A record, for each month, of the calculation of the average monthly mass organic HAP content of: [§63.3130(c)(6)]
    - (1) Sealers and adhesives; and [§63.3130(c)(6)(i)]
    - (2) Deadeners. [§63.3130(c)(6)(ii)]
  - d) A record of the name and volume of each cleaning material used during each month. [§63.3130(d)]
  - e) A record of the mass fraction of organic HAP for each cleaning material used during each month. [§63.3130(e)]
  - f) A record of the density for each cleaning material used during each month. [§63.3130(f)]
  - g) A record of the date, time, and duration of each deviation, and for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction. [§63.3130(g)]
  - h) Records of the data and calculations the permittee used to determine the transfer efficiency for primer-surfacer and topcoat coatings and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c). [§63.3130(m)]
  - i) A record of the work practice plans required by §63.3094(b) and (c) and documentation that the permittee is implementing the plans on a continuous basis. Appropriate documentation may include operational and maintenance records, records of documented inspections, and records of internal audits. [§63.3130(n)]
- 2) The permittee shall keep copies of the current work practice plans developed in accordance with §63.3094(b) and (c) of this section, as well as plans developed within the preceding 5 years must be available on-site for inspection and copying by the permitting authority. [§63.3094(f)]
  - 3) The permittee shall maintain 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. [§63.3131(a)]
  - 4) Except as provided in §63.3130(o), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, as specified in §63.10(b)(1). [§63.3130(b)]
  - 5) Except as provided in §63.3130(o), the permittee 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). The permittee may keep the records off site for the remaining 3 years. [§63.3131(c)]

**Reporting:**

- 1) The permittee shall report any deviations of these permit conditions to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III). [40 CFR 70.6(a)(3)(iii)(A)]
- 2) *General requirements.* The semiannual compliance report must contain the information specified in §63.3120(a)(3)(i) through (iv), and the information specified in §63.3120(a)(4) through (9) and (c)(1) that are applicable to the affected source. [§63.3120(a)(3)]
  - a) Company name and address. [§63.3120(a)(3)(i)]
  - b) 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. [§63.3120(a)(3)(ii)]

- c) 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. [§63.3120(a)(3)(iii)]
- d) Identification of the compliance option specified in §63.3090(b) or §63.3091(b) that the permittee used for electrodeposition primer, primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) in the affected source during the initial compliance period. [§63.3120(a)(3)(iv)]
- 3) *No deviations.* If there were no deviations from the emission limitations or work practices in §§63.3091, 63.3092, and 63.3094 that apply to the permittee, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. [§63.3120(a)(4)]
- 4) *Deviations: adhesive, sealer, and deadener.* If there was a deviation from the applicable emission limits in §63.3091(c) and (d), the semiannual compliance report must contain the information in §63.3120(a)(5)(i) through (iv). [§63.3120(a)(5)]
  - a) The beginning and ending dates of each month during which the monthly average organic HAP content exceeded the applicable emission limit in §63.3091(c) and (d). [§63.3120(a)(5)(i)]
  - b) The volume and organic HAP content of each material used that is subject to the applicable organic HAP content limit. [§63.3120(a)(5)(ii)]
  - c) The calculation used to determine the average monthly organic HAP content for the month in which the deviation occurred. [§63.3120(a)(5)(iii)]
  - d) The reason for the deviation. [§63.3120(a)(5)(iv)]
- 5) *Deviations: combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c).* If there was a deviation from the applicable emission limits in §63.3091(b), the semiannual compliance report must contain the information: [§63.3120(a)(6)]
  - a) The beginning and ending dates of each month during which the monthly organic HAP emission rate from the monthly organic HAP emission rate from combined primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to §63.3082(c) exceeded the applicable emission limit in §63.3090(b) or §63.3091(b). [§63.3120(a)(6)(i)]
  - b) The calculation used to determine the monthly organic HAP emission rate in accordance with §63.3171. The permittee does not need to submit the background data supporting these calculations, for example information provided by materials suppliers or manufacturers, or test reports. [§63.3120(a)(6)(ii)]
  - c) For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions the permittee took to correct the deviation. [§63.3120(a)(6)(xiii)]
  - d) A statement of the cause of each deviation. [§63.3120(a)(6)(xiv)]
- 6) *Deviations: separate electrodeposition primer organic HAP content limit.* If the permittee used the separate electrodeposition primer organic HAP content limits in §63.3092(a), and there was a deviation from these limits, the semiannual compliance report must contain the information in paragraphs §63.3120(a)(7)(i) through (iii). [§63.3120(a)(7)]

- a) Identification of each material used that deviated from the emission limit, and the dates and time periods each was used. [§63.3120(a)(7)(i)]
  - b) The determination of mass fraction of each organic HAP for each material identified in §63.3120(a)(7)(i). The permittee does not need to submit background data supporting this calculation, for example, information provided by material suppliers or manufacturers, or test reports. [§63.3120(a)(7)(ii)]
  - c) A statement of the cause of each deviation. [§63.3120(a)(7)(iii)]
- 7) *Deviations: work practice plans.* If there was a deviation from an applicable work practice plan developed in accordance with §63.3094(b) or (c), the semiannual compliance report must contain the information in §63.3120(a)(9)(i) through (iii). [§63.3120(a)(9)]
- a) The time period during which each deviation occurred. [§63.3120(a)(9)(i)]
  - b) The nature of each deviation. [§63.3120(a)(9)(ii)]
  - c) The corrective action(s) taken to bring the applicable work practices into compliance with the work practice plan. [§63.3120(a)(9)(iii)]

**Permit Condition (EPN-1 through EPN-3) - 002**

10 CSR 10-6.070 New Source Performance Regulations  
40 CFR Part 60, Subpart MM  
Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations  
10 CSR 10-6.060 Construction Permits Required,  
Construction Permit 052012-009, Issued May 16, 2012

**Emission Limitation:**

*EPN-1, Prime Coat (ELPO) System and EPN-2, Guidecoat (Primer Surfacer) System are subject to 40 CFR Part 60, Subpart MM; however, the LAER agreement establishes a more stringent VOC emission limitation of 0.16 and 1.06 kilograms per liter of applied coating solids instead of the 0.17 and 1.40 kilograms per liter of applied coating solids established in Subpart MM. The NSPS and LAER requirements were combined for the ELPO and Guidecoat operations with the more stringent VOC emission limitation included in the permit condition since it would not make a difference in the monitoring, reporting and record keeping requirements of Permit Condition (EPN-1 through EPN-3) - 001.*

- 1) The permittee shall comply with the following Lowest Achievable Emission Rate (LAER) restrictions originally required by permit number 0580-004 and amended by permit number 0294-015. [Construction Permit 052012-009, Special Condition 2.A]
  - a) Emissions of Volatile Organic Compounds (VOC) from the application of Electrostatically Plated Anti-Corrosion Paint (ELPO) (EPN-1) shall not exceed a monthly average of 1.34 pounds VOC per gallon of coating solids applied.
  - b) Emissions of VOC from the application of primer surfacer (EPN-2) shall not exceed a monthly average of 8.82 pounds VOC per gallon of coating solids applied.
  - c) Emissions of VOC from the application of topcoat (EPN-3) shall not exceed a monthly average of 12.26 pounds VOC per gallon of coating solids applied.
- 2) The Permittee shall demonstrate compliance with the emission limits specified in 1) according to the procedures set forth in 40 CFR Part 60 Subpart MM. [Construction Permit 052012-009, Special Condition 2.B]
- 3) The Permittee shall comply with the following Best Available Control Technology (BACT) restriction originally required by permit number 0580-004 and amended by permit number 1089-003. Emissions of particulate matter less than ten microns in diameter (PM10) from the major spray

booth (EPN-2 and EPN-3) stack (ST-200) shall not exceed 2.0 grains per 1000 dry standard cubic feet of air exhausted.

**Performance Test and Compliance Provisions:**

- 1) The permittee shall conduct an initial performance test in accordance with §60.8(a) and thereafter for each calendar month for each affected facility according to the procedures in §60.393. [§60.393(b)]
- 2) The permittee shall use the following procedures for determining the monthly volume weighted average mass of VOC emitted per volume of applied coating solids. [§60.393(c)]
  - a) The permittee shall use the following procedures for each affected facility which uses a capture system and a control device that destroys VOC (e.g., incinerator) to comply with the applicable emission limit. [§60.393(c)(2)]
    - i) Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility as described under §60.393(c)(1)(i) by the following equation. [§60.393(c)(2)(i)]

$$G = \frac{M_o + M_d}{L_s T}$$

Where:

$M_o$  = total mass of VOC in coatings as received (kilograms),  
 $M_d$  = total mass of VOC in dilution solvent (kilograms)  
 $L_s$  = volume of solids in coatings consumed (liters), and  
 $T$  = overall transfer efficiency

- ii) Calculate the volume weighted average mass of VOC per volume of applied solids emitted after the control device, by the following equation: [§60.393(c)(2)(ii)]

$$N = G[1 - FE]$$

Where:

$N$  = volume weighted average mass of VOC per volume of applied coating solids after the control device,  
 $E$  = VOC destruction or removal efficiency of the control device,  
 $F$  = fraction of total VOC which is emitted by an affected facility that enters the control device, and  
 $G$  = volume weighted average mass of VOC per volume of applied solids (kilograms per liter),

- (1) Determine the fraction of total VOC which is emitted by an affected facility that enters the control device by using the following equation where “n” is the total number of stacks entering the control device and “p” is the total number of stacks not connected to the control device:

$$\sum_{i=1}^n p_i$$

If the owner can justify to the Administrator's satisfaction that another method will give comparable results, the Administrator will approve its use on a case-by-case basis.

In subsequent months, the permittee shall use the most recently determined capture fraction for the performance test. [§60.393(c)(2)(ii)(A)]

- (2) Determines the destruction efficiency of the control device using values of the volumetric flow rate of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation where “n” is the total number of stacks entering the control device and “m” is the total number of stacks leaving the control device:

$$E = \frac{\sum_{i=1}^n Q_{bi} C_{bi} - \sum_{j=1}^m Q_{aj} C_{aj}}{\sum_{i=1}^n Q_{bi} C_{bi}}$$

Where:

E = VOC destruction or removal efficiency of the control device,

C<sub>aj</sub> = concentration of VOC (as carbon) in the effluent gas flowing through stack (j) leaving the control device (parts per million by volume),

C<sub>bi</sub> = concentration of VOC (as carbon) in the effluent gas flowing through stack (i) entering the control device (parts per million by volume),

Q<sub>aj</sub> = volumetric flow rate of the effluent gas flowing through stack (j) leaving the control device (dry standard cubic meters per hour), and

Q<sub>bi</sub> = volumetric flow rate of the effluent gas flowing through stack (i) entering the control device (dry standard cubic meters per hour),

In subsequent months, the permittee shall use the most recently determined VOC destruction efficiency for the performance test.

[§60.393(c)(2)(ii)(B)]

- (3) If an emission control device controls the emissions from more than one affected facility, the permittee shall measure the VOC concentration (C<sub>bi</sub>) in the effluent gas entering the control device (in parts per million by volume) and the volumetric flow rate (Q<sub>bi</sub>) of the effluent gas (in dry standard cubic meters per hour) entering the device through each stack. The destruction or removal efficiency determined using these data shall be applied to each affected facility served by the control device. [§60.393(c)(2)(ii)(C)]

- iii) If the volume weighted average mass of VOC per volume of applied solids emitted after the control device (N) calculated on a calendar month basis is less than or equal to the applicable emission limit, the affected facility is in compliance. Each monthly calculation is a performance test for the purposes of 40 CFR Part 60, Subpart MM. [§60.393(c)(2)(iii)]

- 3) The permittee shall use the reference methods and procedures specified in §60.396 to conduct performance tests.

**Recordkeeping and Reporting:**

- 1) The permittee of an affected facility shall identify, record, and submit a written report to the Director every calendar quarter of each instance in which the volume-weighted average of the total mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the emission limit. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Administrator semiannually. Where compliance is achieved through the use of a capture system and control device, the volume-weighted average after the control device should be reported. [§60.395(b)]
- 2) The permittee shall notify the Director 30 days in advance of any test by Method 25. [§60.395(d)]

**Permit Condition (EPN-1 through EPN-3) - 003,  
Permit Condition (EPN-4 and EPN-5) - 002 and  
Permit Condition (EPN-7) - 001**

10 CSR 10-5.330

Control of Emissions From Industrial Surface Coating Operations

**Emission Limitation:**

The permittee shall not allow or permit the discharge into the ambient air any VOC from automobile and light duty truck surface coating operation in excess of the amount allowed in 10 CSR 10-5.330(3)(C)2.B., as given in Tables A and B below.

Table A: Automobile and Light Duty Truck Assembly Coatings:

Coating Category	Emission Limit		
	$R_T < 0.040$	$0.040 < R_T < 0.160$	$R_T \geq 0.160$
Electrodeposition primer (EDP)	No VOC Emission Limit	$0.7 \times 350^{0.160R_T}$ pounds of VOC per gallon of coating solids deposited	0.7 pounds of VOC per gallon of coating solids deposited
Primer Surfacer (Guidecoat)	12.0 pounds of VOC per gallon of coating solids deposited		
Topcoat	12.0 pounds of VOC per gallon of coating solids deposited		
Combined Primer Surfacer and Topcoat	12.0 pounds of VOC per gallon of coating solids deposited		
Final Repair	4.8 pounds of VOC per gallon of coating (minus water & exempt compounds)		

Table B: Miscellaneous Materials:

Material	Emission Limit: lbs VOC/gallon coating (minus water & exempt compounds)
Automobile and light duty truck glass bonding primer	7.5
Automobile and light duty truck adhesive	2.1
Automobile and light duty truck cavity wax	5.4
Automobile and light duty truck sealer	5.4
Automobile and light duty truck deadener	5.4
Automobile and light duty truck gasket/gasket-sealing material	1.7
Automobile and light duty truck underbody coating	5.4

Automobile and light duty truck interior coating	5.4
Automobile and light duty truck bedliner	1.7
Automobile and light duty truck weatherstrip adhesive	6.3
Automobile and light duty truck lubricating wax/compound	5.8

Note: The Miscellaneous Solvent Operation (EPN-7) is only subject to the Work Practice and Work Practice Plan section of this permit condition.

**Monitoring:**

Method and determination of compliance: - The permittee shall use the following methods to achieve compliance with the emission limits in 10 CSR 10-5.330(3)(C)2.B. :

- 1) Spray primer; primer-surfacer; topcoat; and combined primer-surfacer and topcoat. The VOC emission rate, expressed as pounds of VOC per gallon of coating solids deposited, is determined by the procedures in the U.S. Environmental Protection Agency (EPA) document *Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations* (EPA-453/R-08-002), dated September 2008. The surface coating unit is in compliance if the emission rate is less than or equal to the emission limit in Table A;
- 2) Electrodeposition primer (EDP). Determine the monthly volume-weighted average VOC emission rate of the EDP coating unit, expressed as pounds of VOC per gallon of coating solids deposited, per 10 CSR 10-5.330(5)(C)3.D. The monthly volume-weighted average VOC emission rate (MAVG<sub>VWS</sub>) of the electrodeposition primer is calculated by the following formula. The EDP coating unit is in compliance if this value is less than or equal to the emission limit in Table A;

$$MAVG_{VWS} = \left[ \frac{\sum_{i=1}^n L_{C_i} D_{C_i} W_{O_i} + \sum_{j=1}^m L_{D_j} D_{D_j}}{\sum_{i=1}^n L_{C_i} V_{S_i}} \right] \times \left[ 1 - \frac{E}{100} \right]$$

Where:

MAVG<sub>VWS</sub> = monthly volume-weighted average VOC emission rate of the electrodeposition primer, expressed as pounds of VOC per gallon of coating solids deposited;

L<sub>C</sub> = monthly volume of each coating consumed, as received, expressed as gallons;

D<sub>C</sub> = density of each coating as received, expressed as pounds per gallon;

W<sub>O</sub> = weight fraction of VOC in each coating, as received;

L<sub>D</sub> = monthly volume of each type of VOC dilution solvent added to the coating, expressed as gallons;

D<sub>D</sub> = density of each type of VOC dilution solvent added to the coating, expressed as pounds per gallon;

V<sub>S</sub> = volume fraction of solids in each coating as received, expressed as gallons of solids per gallon of coating;

E = overall control system efficiency;

n = number of coatings used; and

m = number of VOC dilution solvents used.

- 3) Final repair coatings. Determine the daily volume-weighted average VOC content of all coatings used in a surface coating unit, expressed as pounds of VOC per gallon of coating (minus water and

exempt compounds) per 10 CSR 10-5.330(5)(C)3.A. The daily mass-weighted average VOC content is calculated using the following formula. The surface coating unit is in compliance if this value is less than or equal to the emission limits in Table A; and

$$DAVG_{MWS} = \frac{\sum_{i=1}^n (A_{MWS_i} \times B_{MWS_i})}{C_{MWS}}$$

$$B_{MWS} = \frac{D_C \times W_O}{D_C \times W_S}$$

Where:

$DAVG_{MWS}$  = daily mass-weighted average VOC content, expressed as pounds of VOC per pound of coating solids;

$A_{MWS}$  = daily pounds of coating solids for each coating used in a surface coating unit;

$B_{MWS}$  = VOC content of the coating as applied, expressed as pounds of VOC per pound of coating solids. This is determined by subparagraph (5)(C)1.C. of 10 CSR 10-5.330;

$C_{MWS}$  = total daily pounds of coatings solids used in a surface coating unit;

$D_C$  = density of coating as applied, expressed as pounds per gallon;

$W_O$  = weight fraction of regulated VOC in the coating, as applied. This value does not include the weight fraction of water or exempt compounds;

$W_S$  = weight fraction of solids in the coating, as applied; and

$n$  = number of coatings used in a surface coating unit.

**Work Practice and Work Practice Plan:**

- 1) Work practices. On or after March 1, 2012, the permittee shall use work practices to minimize VOC emissions from storage, mixing operations, and handling operations for coatings, thinners, cleaning materials, and waste materials. Work practices shall include, but not be limited to, the following:
  - a) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
  - b) Ensure that mixing and storage containers used for VOC-containing coatings, thinners, coating related waste, and cleaning materials are kept closed at all times except when depositing or removing these materials;
  - c) Minimize spills of VOC-containing coatings, thinners, and cleaning materials;
  - d) Clean up spills immediately;
  - e) Convey any coatings, thinners, and cleaning materials in closed containers or pipes from one (1) location to another; and
  - f) Minimize VOC emissions from the cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
- 2) The permittee shall develop and implement a work practice plan to minimize VOC emissions from cleaning and purging of equipment associated with all coating operations for which emission limits are specified in the emission limitation (10 CSR 10-5.330(3)(C)2.B). The plan shall specify practices and procedures to ensure that VOC emissions from the following operations are minimized:
  - a) Vehicle body wiping;
  - b) Coating line purging;
  - c) Flushing of coating systems;

- d) Cleaning of spray booth grates;
- e) Cleaning of spray booth walls;
- f) Cleaning of spray booth equipment;
- g) Cleaning external spray booth areas; and
- h) Other housekeeping measures, such as keeping solvent-laden rags in closed containers.

**Recordkeeping:**

- 1) The permittee shall keep records as necessary to determine compliance. Records kept should be appropriate for the facility, their products, and operations. These may include, as applicable, one (1) or more of the following:
  - a) Current list of coatings used and the VOC content as applied;
  - b) Daily volume usage of each coating;
  - c) Records of the weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating VOC content or a combination of coating VOC content and control system;
  - d) Annual VOC emissions from surface coating equipment cleaning; and
  - e) All test results to determine capture efficiency, control efficiency, and coating properties.
- 2) The permittee may substitute records such as daily production rates for actual daily coating use measurements provided the owner submits a demonstration, approved by the director, that these records are adequate for the purposes of this rule.
- 3) If the permittee uses the catalytic oxidizer to achieve compliance, the permittee shall maintain daily records of key system operating parameters for emission control equipment including, but not limited to:
  - a) Identification of the type of emissions control system used;
  - b) Hours of operation;
  - c) Routine and non-routine maintenance, including dates and duration of any outages;
  - d) Records of test reports conducted;
  - e) If the catalytic oxidizers are used to achieve compliance, the permittee shall comply with the following requirements:
    - i) Continuous temperature monitoring and recording equipment shall be installed and operated to accurately measure the operating temperature(s) for the control devices; and
    - ii) The following information shall be collected and recorded each day of operation of the surface coating unit and the control device:
      - (1) A log or record of the operating time for the control device, monitoring equipment, and the associated surface coating unit; and
      - (2) All three (3)-hour periods of operation during which the average temperature of the exhaust gases immediately before the catalyst bed was more than fifty degrees Fahrenheit (50 °F) below the average temperature of the exhaust gases during the most recent emission test that demonstrated that the surface coating unit(s) was in compliance, and all three (3)-hour periods during which the average temperature difference across the catalyst bed was less than eighty percent (80%) of the average temperature difference during the most recent emission test(s) that demonstrated that the surface coating operation(s) was in compliance; and
- 4) The permittee shall accomplish the required record keeping in accordance with the requirements of 10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements, as stated in Section V of this permit.

**Reporting:**

The permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation. Any deviations from this permit condition shall be reported in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

<b>EPN-8 – Powerhouse Boilers</b> <b>Three Natural Gas Fired Boilers</b> Equipped with CEMS for NO <sub>x</sub> and Continuous Oxygen Trim system		
Emission Unit	Description	Manufacturer/ Model #
EPN-8	Boiler #2, 248 MMBtu/hr, Installed 1982	Zurn Two Drum Open Pass
	Boiler #3, 248 MMBtu/hr, Installed 1982	Zurn Two Drum Open Pass
	Boiler #4, 248 MMBtu/hr, Installed 1982	Zurn Two Drum Open Pass

**Permit Condition (EPN-8) - 001**

10 CSR 10-6.060 Construction Permits Required  
Construction Permit Number 032013-010

**Emission Limitation:**

CO<sub>2e</sub> Emission Limitation: The permittee shall emit less than 180,762 tons of CO<sub>2e</sub> in any consecutive 12-month period from the powerhouse boilers.

[Construction Permit 032013-010, Special Condition 4.A.]

**Operational Limitation:**

- 1) Operation of Continuous Emissions Monitors (CEMs): [Construction Permit 032013-010, Special Condition 3]
  - a) The Permittee shall install, certify, operate, calibrate, test and maintain continuous emission monitors (CEMs) to ensure that the NO<sub>x</sub> emission rate is less than 140 pounds per million standard cubic feet (mmscf) of natural gas.
    - i) CEMs certification shall be made pursuant to 40 CFR Part 60, Appendix B, Performance Specification 2. [Construction Permit 032013-010, Special Condition 3.A.1)]
    - ii) Periodic quality assurance assessments shall be conducted according to the procedures outlined in 40 CFR Part 60, Appendix F. [Construction Permit 032013-010, Special Condition 3.A.2)]
    - iii) The Permittee shall install and operate a data acquisition and handling system to calculate emission in terms of the emission limitations specified in Construction Permit 032013-010. [Construction Permit 032013-010, Special Condition 3.A.3)]
    - iv) The NO<sub>x</sub> emission rates shall be based on a 12-month rolling average. [Construction Permit 032013-010, Special Condition 3.A.4)]
  - b) If results from the CEMs required in Special Condition 3.A. of Construction Permit 032013-010 show that the emissions of the pollutants are greater than the limits in Special Condition 3.A., the permittee shall evaluate what effect these emission rates have on permit applicability and submit such evaluation to the Air Pollution Control Program. [Construction Permit 032013-010, Special Condition 3.B.]

2) Fuel Restrictions: [Special Condition 5]

- a) The Permittee shall only combust pipeline-grade natural gas, as defined in 40 CFR 72.2, in the powerhouse boilers.  
[Construction Permit 032013-010, Special Condition 5.A.]
- b) To maintain compliance with the sulfur content limit in 40 CFR 72.2 for pipeline-grade natural gas, the permittee shall either obtain the sulfur content of the natural gas from the fuel vendor or perform its own fuel analysis to evaluate the sulfur content of the natural gas. [Construction Permit 032013-010, Special Condition 5.B.]

**Recordkeeping and Reporting:**

- 1) The permittee shall use Attachment F, or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program to demonstrate compliance with CO<sub>2</sub>e emission limitation of this permit condition. [Construction Permit 032013-010, Special Condition 4.B.]
- 2) The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.  
[Construction Permit 032013-010, Special Condition 6.A.]
- 3) The Permittee shall report to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit. [Construction Permit 032013-010, Special Condition 6.B.]
- 4) The permittee shall keep records in accordance with 40 CFR 52.21(r)(6).  
[Construction Permit 032013-010, Special Condition 6.C.]

**Permit Condition (EPN-8) - 002**

10 CSR 10-5.510

Control of Emissions of Nitrogen Oxides

**Emission Limitation:**

- 1) The permittee shall not allow the boilers to emit NO<sub>x</sub> in excess of 0.2 pounds of NO<sub>x</sub> per MMBtu as measured pursuant to section (5) of 10 CSR 10-5.510. [10 CSR 10-5.510(3)(A)]
- 2) Operational Limitation 1)a) of Permit condition (EPN-8) - 001 states that the Permittee shall install, certify, operate, calibrate, test and maintain continuous emission monitors (CEMs) to ensure that the NO<sub>x</sub> emission rate is less than 140 pounds per million standard cubic feet (mmscf) of natural gas. The NO<sub>x</sub> limit in Permit condition (EPN-8) – 001 of Construction Permit 032013-010 is more stringent than 10 CSR 10-5.510. Compliance with this permit condition shall be maintained when EPN-8 boilers are in compliance with the NO<sub>x</sub> limit of Construction Permit 032013-010.

**Monitoring:**

- 1) Emissions Averaging – The permittee may comply with the emission limitations by averaging between two or more similar emission units provided they are located in the St. Louis ozone nonattainment area and provided that both units are required to comply with 10 CSR 10-5.510(3)(A).
  - a) The permittee shall base compliance on the weighted average of actual NO<sub>x</sub> emissions from the units on a monthly basis. The averaged emissions rate for the units must be equal to or less than the allowable emissions rate for the units as defined in 10 CSR 10-5.510. The permittee who elects to comply with an average NO<sub>x</sub> emission limit shall use the following equation to determine compliance.

$$\sum (ER_{Actual} \times HI_{Actual}) \leq \sum (ER_{Allowable} \times HI_{Actual})$$

Where:

$ER_{Actual}$  = actual NO<sub>x</sub> emission rate from each unit;

$HI_{Actual}$  = actual monthly heat input from each unit; and

$ER_{Allowable}$  = allowable NO<sub>x</sub> emission rate from each unit

- b) The permittee shall calculate NO<sub>x</sub> emission rates from actual data from continuous emissions monitoring system (CEMS).
- 2) For units operating CEMS for estimating NO<sub>x</sub> emissions, the following requirements shall apply:
  - a) Compliance shall be measured on a 30-day rolling average;
  - b) All valid data shall be used for calculating NO<sub>x</sub> emission rates;
  - c) The procedures under 40 CFR 60.13(d), (e) and (f) and 40 CFR Part 60, Appendix B, Performance Specification 2 shall be followed, or other procedures approved by the director; for the installation, evaluation and operation of CEMS.
  - d) Quarterly accuracy and daily calibration drift test shall be performed in accordance with 40 CFR Part 60, Appendix F, or other tests approved by the director; and
  - e) CEMS installed, certified and operated in accordance with 40 CFR Part 75 are deemed to be approved by the director to meet the monitoring and quality assurance requirements of 10 CSR 10-5.510(5)(B).

**Recordkeeping:**

- 1) Subject to 10 CSR 10-5.510(3)(A) –The permittee shall maintain records of the following:
  - a) All data collected by the CEMS necessary to convert the monitoring data to the units of the applicable emission limitation;
  - b) All performance evaluations conducted in the past year;
  - c) All CEMS or monitoring device calibration checks;
  - d) All monitoring system, monitoring device and performance testing measurements;
  - e) Records of adjustments and maintenance performed on monitoring systems and devices; and
  - f) A log identifying each period during which the CEMS was inoperative, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative.
- 2) The permittee shall keep all records on-site for a period of five years and shall make the records available to the department upon request.

**Reporting:**

Subject to 10 CSR 10-5.510(3)(A) –The permittee shall submit for each NO<sub>x</sub> emissions unit that uses a CEMS to demonstrate compliance, an annual report containing the date, time and emissions rate in pounds NO<sub>x</sub> per MMBtu of all thirty (30)-day rolling averages greater than the emission rates allowed under section (3) of this rule.

**Permit Condition (EPN-8) - 003**

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations  
40 CFR Part 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for  
Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

**Work Practice Standards:**

- 1) As stated in §63.7500, the permittee must comply with the following applicable work practice standards: [Items 1 and 4 of Table 3 to Subpart DDDDD of Part 63]
  - a) The permittee shall conduct a tune-up of the boilers every five years as specified in §63.7540.
  - b) The permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and the compliance date specified in §63.7495 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items listed below appropriate for the on-site technical hours listed in §63.7575:
    - i) A visual inspection of the boiler or process heater system.
    - ii) An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
    - iii) An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
    - iv) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
    - v) A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.
    - vi) A list of cost-effective energy conservation measures that are within the facility's control.
    - vii) A list of the energy savings potential of the energy conservation measures identified.
    - viii) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
- 2) At all times, The permittee must operate and maintain the boilers, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the boilers.  
[§63.7500(a)(3)]

**Initial Compliance Demonstration:**

- 1) The permittee must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 to this subpart, and that the assessment is an accurate depiction of the permittee's facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended. [§63.7545(e)]
- 2) The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e). [§63.7545(f)]

**Continuous Compliance Demonstration with the Work Practice Standards:**

- 1) The permittee must conduct a tune-up of the boilers every 5 years as specified in §63.7540 (a)(10)(i) through (vi) (listed below). The permittee may delay the burner inspection specified in paragraph 63.7540 (a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. The permittee must set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. [§63.7540(a)(12)]
  - a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; [§63.7540(a)(10)(i)]
  - b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [§63.7540(a)(10)(ii)]
  - c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown) ; [§63.7540(a)(10)(iii)]
  - d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications; [§63.7540(a)(10)(iv)]
  - e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [§63.7540(a)(10)(v)]
  - f) Maintain on-site and submit, if requested by the Director, a report containing the information in §63.7540 (a)(10)(vi)(A) through (C) (listed below), [§63.7540(a)(10)(vi)]
    - i) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; [§63.7540(a)(10)(vi)(A)]
    - ii) A description of any corrective actions taken as a part of the tune-up; and [§63.7540(a)(10)(vi)(B)]
    - iii) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. [§63.7540(a)(10)(vi)(C)]
- 2) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13)]
- 3) The permittee must report each instance in which the permittee did not meet operating limit in Tables 3 to this subpart that applies to the permittee. These instances are deviations from the

operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in §63.7550. [§63.7540(b)]

**Reporting:**

1) *Notification:*

- a) If the permittee intends to use a fuel other than natural gas to fire the boiler(s) during a period of natural gas curtailment or supply interruption, as defined in §63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in §63.7545(f)(1) through (5) (listed below). [§63.7545(f)]
  - i) Company name and address. [§63.7545(f)(1)]
  - ii) Identification of the affected unit. [§63.7545(f)(2)]
  - iii) Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began. [§63.7545(f)(3)]
  - iv) Type of alternative fuel that the permittee intends to use. [§63.7545(f)(4)]
  - v) Dates when the alternative fuel use is expected to begin and end. [§63.7545(f)(5)]
- b) If the permittee has switched fuels or made a physical change to the boiler(s) and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify: [§63.7545(h)]
  - i) The name of the owner or operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) that have switched fuels, were physically changed, and the date of the notice. [§63.7545(h)(1)]
  - ii) The currently applicable subcategory under this subpart. [§63.7545(h)(2)]
  - iii) The date upon which the fuel switch or physical change occurred. [§63.7545(h)(3)]

2) *Reports:*

- a) The permittee must submit each report in the table below that applies to the permittee. [§63.7550(a) and Table 9 to Subpart DDDDD of 40 CFR Part 63]

The permittee Must Submit a	The Report Must Contain	The Permittee Must Submit the Report
1. Compliance report	a. Information required in §63.7550(c)(1) and (5); and	Every 5 years according to the requirements in §63.7550(b).
	b. If there are no deviations the requirements for work practice standards for periods of startup and shutdown in Table 3 to this subpart that apply to the permittee, a statement that there were no deviations from work practice standards during the reporting period; and	
	c. If the permittee has deviation from a work practice standard for periods of startup and shutdown, during the reporting period, the report must contain the information in §63.7550(d).	

- b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee must submit each report, according to §63.7550(h)(3), by the date in Table 9 to Subpart DDDDD of 40 CFR Part 63 and according to the requirements in

§63.7550(b)(1) through (4) (listed below). For units that are subject only to a requirement to conduct subsequent annual, tune-up according to §63.7540(a)(10), and not subject to emission limits or Table 4 operating limits, the permittee may submit only a 5-year compliance report, as applicable, as specified in §63.7550(b)(1) through (4), instead of a semi-annual compliance report. [§63.7550(b)]

- i) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler in §63.7495 and ending on December 31 within 5 years, after January 31, 2016 as specified in §63.7495. [§63.7550(b)(1)]
- ii) The first 5-year compliance report must be postmarked or submitted no later than January 31. [§63.7550(b)(2)]
- iii) Each 5-year compliance reports must cover the applicable 5-year periods from January 1 to December 31. [§63.7550(b)(3)]
- iv) Each 5-year compliance reports must be postmarked or submitted no later than January 31. [§63.7550(b)(4)]
- v) The permittee may submit the first and subsequent compliance reports according to the dates specified in Section V of this Permit instead of according to the dates in §63.7550(b)(1) through (4) (listed above). [§63.7550(b)(5)]
- c) A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule. [§63.7550(c)]
  - i) For the requirements of a tune up the permittee must submit a compliance report with the information in §63.7550(c)(5)(i) through (iii), §63.7550 (xiv) and (xvii), and §63.7550(c)(5)(iv) (listed below). [§63.7550(c)(1)]
  - ii) Company and Facility name and address. [§63.7550(c)(5)(i)]
  - iii) Process unit information. [§63.7550(c)(5)(ii)]
  - iv) Date of report and beginning and ending dates of the reporting period. [§63.7550(c)(5)(iii)]
  - v) The total operating time during the reporting period. [§63.7550(c)(5)(iv)]
  - vi) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct 5-year tune-up according to §63.7540(a)(10). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. [§63.7550(c)(5)(xiv)]
  - vii) 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. [§63.7550(c)(5)(xiv)]
- d) For each deviation from the work practice standards for periods of startup and shutdown, the compliance report must additionally contain the information required in §63.7550(d)(1) and (2) (listed below). [§63.7550(d)]
  - i) A description of the deviation and which work practice standard from which the permittee deviated. [§63.7550(d)(1)]
  - ii) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken. [§63.7550(d)(2)]
- e) The permittee must submit all reports required by Table 9 of this subpart electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in §63.13. The permittee must begin submitting

reports via CEDRI no later than 90 days after the form becomes available in CEDRI.  
[§63.7550(h)(3)]

**Recordkeeping:**

- 1) The permittee must keep a copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirements in §63.10(b)(2)(xiv). [§63.7555(a)(1)]
- 2) If the permittee operates a unit in the unit designed to burn gas 1 subcategory that is subject to this subpart, and the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under this part, other gas 1 fuel, or gaseous fuel subject to another subpart of this part or part 60, 61, or 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. [§63.7555(h)]
- 3) The permittee's records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). [§63.7560(a)]
- 4) As specified in §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.7560(b)]
- 5) The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [§63.7560(c)]

<b>EG1 through EG6 – Emergency Diesel Generators EG7 and EG8 – Fire Pump Diesel Engines</b>	
Emission Unit	Description
EG1	Computer Room Emergency Generator - 464 Horsepower (HP) Cummins Generator. Model: QSL9-G7- NR3, Serial #I120385603. Type: 4 cycle, in-line, 6 cylinder with a total displacement of 8.9 liters. EPA Model Year: 2012, Purchase /Installation Date: 2012
EG2	Body Shop Emergency Generator – 617 HP John Deer Diesel Generator. Model: 6135HF485, Serial #RG6135L027453. Type - 4 cycle, in-line, 6 cylinder with a total displacement of 13.5 liters. EPA Model Year: 2012, Purchase /Installation Date: 2013
EG3	Paint Emergency Generator – 335 HP Detroit Diesel. Model: 70837305, Serial #8VA416817. EPA Model Year: 1982, Purchase /Installation Date: 1982
EG4	Trim Emergency Generator – 538 HP John Deere Diesel. Model: John Deere, 6135HFG84, Serial #RG6135L031035. Type - 4 cycle, 6 cylinder, in-line with a total displacement of 13.5 liters EPA Model Year: 2015, Purchase /Installation Date: 2015/2016
EG5	Chassis Emergency Generator – 385 HP John Deere Diesel. Model: 70837305, Serial #RG6090L125437. Type - 4 cycle, 6 cylinder, in-line with a total displacement of 9.0 liters EPA Model Year: 2015, Purchase /Installation Date: 2015/2016
EG6	Powerhouse Emergency Generator – 1325 HP Detroit Diesel. Model: 91637305 Serial #16E0006682. EPA Model Year: 1982, Purchase /Installation Date: 1982
EG7	A47 Fire Pump Engine (Emergency CI RICE) – 188 HP Detroit Diesel. Model: 10447312, Serial #4A0253555. EPA Model Year: 1982, Purchase /Installation Date: 1982
EG8	Powerhouse Fire Pump Engine (Emergency CI RICE) – 288 HP Detroit Diesel. Model: DDFD-06AT, Serial #6A0417778. EPA Model Year: 1982, Purchase /Installation Date: 1982

### **Permit Condition (EG1, EG2, EG4 and EG5) - 001**

10 CSR 10-6.070 New Source Performance Regulations  
40 CFR Part 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

#### **Emission Limitation/Standards:**

*2007 model year and later emergency CI ICE - with a displacement of less than 30 liters per cylinder*

- 1) The Permittee must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [§60.4205(b)]
- 2) The General Provisions of 40 CFR 60.1 through 19 apply as indicated in Table 8 of 40 CFR 60, Subpart IIII except that the permittee is not required to submit initial notification. [§60.4218 & §60.4214(b)]

- 3) The permittee must operate and maintain the emergency stationary CI ICE that achieve the emission standards as required in §60.4205(b) over the entire life of the engines. [§60.4206]

**Operational Limitation:**

The permittee must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted: [§60.4207(b)]

- 1) Sulfur content. 15 parts per million (ppm) maximum. [§80.510(b)(1)(i)]
- 2) Cetane index or aromatic content, as follows: [§80.510(b)(2)]
  - a) A minimum cetane index of 40; or [§80.510(b)(2)(i)]
  - b) A maximum aromatic content of 35 volume percent. [§80.510(b)(2)(ii)]

**Monitoring/Compliance Requirements:**

- 1) Prior to the startup of each engine, the permittee must install a non-resettable hour meter on each engine that does not meet the applicable emission standards for non-emergency engines. [§60.4209(a)]
- 2) The permittee must do all of the following, except as permitted under §60.4211(g): [§60.4211(a)]
  - a) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [§60.4211(a)(1)]
  - b) Change only those emission-related settings that are permitted by the manufacturer; and [§60.4211(a)(2)]
  - c) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [§60.4211(a)(3)]
- 3) The permittee must comply with the emission standards specified in §60.4205(b), the permittee must comply by purchasing an engine certified to the emission standards in §60.4205(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in §60.4211(g). [§60.4211(c)]
- 4) The permittee must operate the emergency stationary ICE according to the requirements in §60.4211(f)(1), (f)(2)(i) and (f)(3). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §60.4211(f)(1), (f)(2)(i) and (f)(3), is prohibited. If the permittee does not operate the engine according to the requirements in §60.4211(f)(1), (f)(2)(i) and (f)(3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§60.4211(f)]
  - a) There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4211(f)(1)]
  - b) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs §60.4211 (f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by §60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph §60.4211 (f)(2)(i). [§60.4211(f)(2)]
    - i) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or

operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

[§60.4211(f)(2)(i)]

- c) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in §60.4211(f)(2). Except as provided in §60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [§60.4211(f)(3)]
- i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [§60.4211(f)(3)(i)]
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [§60.4211(f)(3)(i)(A)]
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [§60.4211(f)(3)(i)(B)]
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [§60.4211(f)(3)(i)(C)]
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system. [§60.4211(f)(3)(i)(D)]
- (E) The permittee identifies and records the entity that dispatches the engine and the specific North American Electric Reliability Corporation (NERC), regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [§60.4211(f)(3)(i)(E)]

**Record Keeping/Reporting:**

Notification, Reports, and Records: [§60.4214]

According to §60.4214(b), the permittee is not required to submit an initial notification.

**Permit Condition (EG3, EG6, EG7 and EG8) - 001**

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds<sup>1</sup>

**Emission Limitation:**

The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m<sup>3</sup> of sulfuric acid or sulfur trioxide or any combination

<sup>1</sup> 10 CSR 10-6.260 was rescinded on November 30, 2015 and replaced by 10 CSR 10-6.261; however, the provisions of 10 CSR 10-6.260 currently remain in the State Implementation Plan and are federally enforceable. The provisions of 10 CSR 10-6.260 will expire and the provisions of 10 CSR 10-6.261 will become federally enforceable once 10 CSR 10-6.261 is incorporated into the federally-approved SIP as a final EPA action. Permit Condition (EG3, EG6, EG7 and EG8) - 001 will expire and the limitations thereof will no longer apply to the installation once 10 CSR 10-6.261 is incorporated into the SIP.

of those gases averaged on any consecutive three-hour time period the emergency generators (EG3 and EG6) and fire pump engines (EG7 and EG8).. [10 CSR 10-6.260(3)(A)2.]

**Operational Limitation:**

The permittee shall be limited to burning low sulfur fuel oil with a sulfur content of no more than 15 ppmv to meet the limits of this rule.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used. Fuel purchase receipts analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) Record keeping shall be accomplished in accordance with the requirements of 10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements, as stated in Section V of this permit.

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the annual compliance certification to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

**Permit Condition (EG3, EG6, EG7 and EG8) - 002**

10 CSR 10-6.261 Control of Sulfur Dioxide Emissions<sup>2</sup>

**Emission Limitation:**

The permittee must limit the fuel sulfur content of the fuel oil to no more than 8,812 parts per million (ppm). [10 CSR 10-6.261(3)(C)]

**Compliance Demonstration:**

The permittee must determine compliance with the fuel sulfur content limitation of this permit condition as follows:

- 1) Fuel delivery records; or
- 2) Fuel sampling and analysis; or
- 3) Fuel supplier certification letters may be used as an alternate method of compliance.

**Record Keeping:**

- 1) The permittee must maintain fuel delivery/purchase receipts and/or fuel sampling tests as applicable or fuel oil supplier certification letters.
- 2) The permittee must maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable to comply with the requirements of this rule:
  - a) The name, address, and contact information of the fuel supplier;
  - b) The type of fuel (diesel or #2 fuel oil);
  - c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and
  - d) The heating value of the fuel.
- 3) The permittee must use fuel sampling and analysis to determine sulfur weight percent, or equivalent, of fuel(s) in accordance with 10 CSR 10-6.040. This requirement does not apply if the permittee uses the fuel supplier certification as a method of compliance.
- 4) The permittee must retain all reports and records on-site for a minimum of five (5) years and make available within five (5) business days upon written or electronic request by the Director.

**Reporting:**

- 1) The permittee must furnish the Director all data necessary to determine compliance status.
- 2) The permittee shall report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the Director for each calendar quarter within thirty (30) days following the end of the quarter. In all cases, the notification must be written and include the information listed in 10 CSR 10-6.261 (4) (A) 1.
- 3) The permittee shall report any deviations/exceedances of this permit condition using the annual monitoring report and annual compliance certification to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit.

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<sup>2</sup> Ibid.

### Permit Condition (EG3, EG6, EG7 and EG8) – 003

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations  
40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

#### **Emission Limitation/Standards:**

- 1) As stated in §6602 the permittee must comply with the following requirements for existing compression ignition stationary RICE  $\leq 500$  HP: [Table 2c to Subpart ZZZZ of Part 63]

For each .....	The permittee must meet the following requirement, except during periods of startup	During periods of startup The permittee must
Emergency CI RICE <sup>1</sup> (EG3), Fire Pump Engines (EG7 and EG8)	<ol style="list-style-type: none"> <li>a. Change oil and filter every 500 hours of operation or annually, whichever comes first;</li> <li>b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;<sup>2</sup></li> <li>c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary<sup>3</sup></li> </ol>	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

<sup>1</sup>If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

<sup>2</sup>The permittee has the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

<sup>3</sup>The permittee can petition the Director pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

#### **Monitoring, Operation and Maintenance Requirements:**

- 1) The permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop the permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [§63.6625(e)]
- 2) The permittee must install a non-resettable hour meter if one is not already installed. [§63.6625(f)]
- 3) The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to Subpart ZZZZ of Part 63 apply. [§63.6625(h)]
- 4) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c to this subpart (see Emission

Limitation/Standards of this permit condition). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil before continuing to use the engine. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [§63.6625(i)]

**Compliance Requirements:**

- 1) The permittee must be in compliance with the emission limitations and operating limitations in Subpart ZZZZ of 40 CFR Part 63 that apply to the permittee at all times. [§63.6605(a)]
- 2) The permittee must demonstrate continuous compliance with each requirement of emission limitation and operating limitation in Tables 2c to Subpart ZZZZ of 40 CFR Part 63 (see Emission Limitation/Standards of this permit condition) according to methods specified below (from Table 6 to Subpart ZZZZ of 40 CFR Part 63). [§63.6640(a)]

For Each...	Complying with the requirements to ...	The permittee must demonstrate continuous compliance by ...
Existing stationary CI RICE not subject to any numerical emission limitations	Work or Management practices	<ol style="list-style-type: none"> <li>i Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or</li> <li>ii Develop and follow the permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.</li> </ol>

- 3) The permittee must at all times operate and maintain the emergency fire pumps and emergency generator in a manner consistent with safety and good air pollution control practices for minimizing emissions. [§63.6605(b)]
- 4) The permittee must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of §63.6640. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of §63.6640, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of §63.6640, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§63.6640(f)]
  - a) There is no time limit on the use of emergency stationary RICE in emergency situations. [§63.6640(f)(1)]
  - b) The permittee may operate the emergency stationary RICE for any combination of the purposes specified in paragraph (f)(2)(i) §63.6640 for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of §63.6640

counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

[§63.6640(f)(2)]

- i) The emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

§63.6640(f)(2)(i)]

- c) The emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. Except as provided in paragraph (f)(4)(ii) of §63.6640, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

- i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

[§63.6640(f)(4)(ii)]

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [§63.6640(f)(4)(ii)(A)]

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [§63.6640(f)(4)(ii)(B)]

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific North American Electric Reliability Corporation NERC, regional, state, public utility commission or local standards or guidelines. [§63.6640(f)(4)(ii)(C)]

(D) The power is provided only to the facility itself or to support the local transmission and distribution system. [§63.6640(f)(4)(ii)(D)]

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [§63.6640(f)(4)(ii)(E)]

**Recordkeeping:**

- 1) The permittee must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of §63.6655. [§63.6655(a)]
  - a) A copy of each notification and report that you submitted to comply with Subpart ZZZZ of 40 CFR Part 63, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]
  - b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
  - c) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b). [§63.6655(a)(5)]

- 2) The permittee must keep the records required in Table 6 of Subpart ZZZZ of 40 CFR Part 63 to show continuous compliance with each emission or operating limitation that applies to you. [§63.6655(d)]
- 3) The permittee's records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]
- 4) As specified in §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6660(b)]
- 5) The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]

**Reporting:**

- 1) The permittee must report each instance in which you did not meet each emission limitation or operating limitation in Table 2d to Subpart ZZZZ of 40 CFR Part 63 that applies. These instances are deviations from the emission and operating limitations in Subpart ZZZZ of 40 CFR Part 63. These deviations must be reported according to the requirements in §63.6650. [§63.6640(b)]
- 2) The permittee must also report each instance in which the permittee did not meet the requirements in Table 8 to Subpart ZZZZ of 40 CFR Part 63 — Applicability of General Provisions to Subpart ZZZZ that apply. [§63.6640(e)]
- 3) *Reporting requirements* [§63.6650]
  - a) The permittee must submit each report in Table 7 of Subpart ZZZZ of 40 CFR Part 63 that applies. [§63.6650(a)]
  - b) Pursuant to 40 CFR §63.6650(b)(5), the permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section V of this permit instead of according to the dates specified in paragraphs (b)(1) through (b)(4) of §63.6650.
  - c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of §63.6650. [§63.6650(c)]
    - i. Company name and address. [§63.6650(c)(1)]
    - ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)(2)]
    - iii. Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]
    - iv. If the permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]
    - v. If there are no deviations from any emission or operating limitations that apply, a statement that there were no deviations from the emission or operating limitations during the reporting period. [§63.6650(c)(5)]
  - d) For each deviation from an emission or operating limitation that occurs for the stationary RICE where the permittee is not using a CMS to comply with the emission or operating limitations in Subpart ZZZZ of 40 CFR Part 63, the Compliance report must contain the information in paragraphs (c)(1) through (4) of §63.6650 and the information in paragraphs (d)(1) and (2) of §63.6650. [§63.6650(d)]

- i. The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]
- ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(d)(2)]
- e) The permittee must report all deviations as defined in Subpart ZZZZ of 40 CFR Part 63 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 the permittee submits a Compliance report pursuant to Table 7 of Subpart ZZZZ of 40 CFR Part 63 along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ of 40 CFR Part 63, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the permit authority. [§63.6650(f)]
- f) If the permittee operates the emergency stationary RICEs for the purpose specified in §63.6640(f)(4)(ii) (item 4c Compliance Requirements of this Permit Condition) , the permittee must submit an annual report according to the requirements in §63.6650 (h)(1) through (3) except §63.6650 (h)(1) (v) and (vi) (listed below). [§63.6650(h)]
  - i. The report must contain the following information: [§63.6650 (h)(1)]
    - (a) Company name and address where the engine is located.
    - (b) Date of the report and beginning and ending dates of the reporting period.
    - (c) Engine site rating and model year.
    - (d) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
    - (e) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
    - (f) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
    - (g) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.
  - ii. The permittee must submit the subsequent annual reports for each calendar year no later than March 31 of the following calendar year.
  - iii. The permittee must submit the annual report electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

## IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following are only excerpts from the regulation or code, and are provided for summary purposes only.

### 10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.

### 10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;
  - h) Estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, notice shall be given as soon as practicable prior to the activity.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

#### **10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

#### **10 CSR 10-6.065 Operating Permits**

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

#### **10 CSR 10-6.100 Alternate Emission Limits**

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

#### **10 CSR 10-6.110 Reporting of Emission Data, Emission Fees and Process Information**

- 1) The permittee shall submit a Full Emissions Report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 3) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.

#### **10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

#### **10 CSR 10-6.150 Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

### **10 CSR 10-6.165 Restriction of Emission of Odors**

#### **This is a State Only permit requirement.**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

### **10 CSR 10-6.170**

#### **Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

### **10 CSR 10-6.180 Measurement of Emissions of Air Contaminants**

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

### **10 CSR 10-6.280 Compliance Monitoring Usage**

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  - a) Monitoring methods outlined in 40 CFR Part 64;

- b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at an installation:
- a) Monitoring methods outlined in 40 CFR Part 64;
  - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a) Applicable monitoring or testing methods, cited in:
    - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - ii) 10 CSR 10-6.040, "Reference Methods";
    - iii) 10 CSR 10-6.070, "New Source Performance Standards";
    - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

#### **10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited**

No owner or operator shall operate applicable hand-fired fuel burning equipment unless the owner or operator meets the conditions set forth in 10 CSR 10-5.040. This regulation shall apply to all hand-fired fuel-burning equipment at commercial facilities including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing or to other equipment exempted under 10 CSR 10-5.040. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

#### **10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations (Rescinded on February 11, 1979, Contained in State Implementation Plan)**

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

#### **40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)**

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
- a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR §82.106.
  - b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.

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- d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §82.112.
  - 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B of 40 CFR Part 82:
    - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 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 described in 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.
    - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
    - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156.
    - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166.
  - 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
  - 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements contained in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
  - 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82.*

## V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

### **10 CSR 10-6.065(6)(C)1.B Permit Duration**

### **10 CSR 10-6.065(6)(E)3.C Extension of Expired Permits**

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

### **10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements**

#### **1) Record Keeping**

- a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
- b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.

#### **2) Reporting**

- a) All reports shall be submitted to the Air Pollution Control Program, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
- b) The permittee shall submit a report of all required monitoring by:
  - i) October 1st for monitoring which covers the January through June time period, and
  - ii) April 1st for monitoring which covers the July through December time period.
- c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
- d) Submit supplemental reports as required or as needed. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
  - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

#### **10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)**

If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

#### **10 CSR 10-6.065(6)(C)1.F Severability Clause**

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

#### **10 CSR 10-6.065(6)(C)1.G General Requirements**

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

### **10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions**

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

### **10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios**

None.

### **10 CSR 10-6.065(6)(C)3 Compliance Requirements**

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an 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 and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
  - c) Whether compliance was continuous or intermittent;
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and

- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

#### **10 CSR 10-6.065(6)(C)6 Permit Shield**

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
  - a) The applicable requirements are included and specifically identified in this permit, or
  - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
  - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
  - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
  - c) The applicable requirements of the acid rain program,
  - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
  - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

#### **10 CSR 10-6.065(6)(C)7 Emergency Provisions**

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

#### **10 CSR 10-6.065(6)(C)8 Operational Flexibility**

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously

emitted. The permittee shall notify the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd.,

Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
  - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.
  - b) The permit shield shall not apply to these changes.

#### **10 CSR 10-6.065(6)(C)9 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the permit, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
  - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3 of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
  - d) The permit shield shall not apply to these changes.

### **10 CSR 10-6.020(2)(R)34 Responsible Official**

The application utilized in the preparation of this permit was signed by Nancy Laubenthal, Plant Manager. If this person terminates employment, or is reassigned different duties such that a different

person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

### **10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire;or
  - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

### **10 CSR 10-6.065(6)(E)1.C Statement of Basis**

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

## **VI. Attachments**

Attachments follow.

Attachment A – Equipment List

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_.

Attachment A: Equipment List								
Source Description	Emission Unit Description	Existing New Modified	Pre-Approved Change Category	Start of Construction	Start of Operation	Date of Removal	Pollutants	Applicable VOC Requirements
EPN-1 ELPO	electro deposition dip coating process	Existing	N/A	N/A	N/A	N/A	VOC	LAER 40 CFR 60 (MM) 10 CSR 10-5.330
EPN-2 Primer Surfacer	Exterior Prime Booth	Existing	N/A	N/A	N/A	N/A	VOC, PM, HAP	LAER 40 CFR 60 (MM) 10 CSR 10-5.330
EPN-3 Topcoat	Interior Prime Booth	Existing	N/A	N/A	N/A	N/A	VOC, PM, HAP	LAER 40 CFR 60 (MM) 10 CSR 10-5.330
EPN-3 Topcoat	Color Line 1 Spray Booth	Existing	N/A	N/A	N/A	N/A	VOC, PM, HAP	LAER 40 CFR 60 (MM) 10 CSR 10-5.330
EPN-3 Topcoat	Color Line 2 Spray Booth	Existing	N/A	N/A	N/A	N/A	VOC, PM, HAP	LAER 40 CFR 60 (MM) 10 CSR 10-5.330
EPN-3 Topcoat	Spot / Panel Repair	Existing	N/A	N/A	N/A	N/A	VOC, PM, HAP	LAER 40 CFR 60 (MM) 10 CSR 10-5.330
EPN-4 Final Repair	6 Spot Repair Booths	Existing	N/A	N/A	N/A	N/A	VOC, PM, HAP	10 CSR 10-5.330
EPN-5 Miscellaneous Sealers and Adhesives	Adhesives	Existing	N/A	N/A	N/A	N/A	VOC	10 CSR 10-5.330

Attachment A: Equipment List								
Source Description	Emission Unit Description	Existing New Modified	Pre- Approved Change Category	Start of Construction	Start of Operation	Date of Removal	Pollutants	Applicable VOC Requirements
EPN-5 Miscellaneous Sealers and Adhesives	Deadener	Existing	N/A	N/A	N/A	N/A	VOC	10 CSR 10-5.330
EPN-5 Miscellaneous Sealers and Adhesives	Glass Bonding Primer	Existing	N/A	N/A	N/A	N/A	VOC	10 CSR 10-5.330
EPN-5 Miscellaneous Sealers and Adhesives	Weatherstrip adhesive	Existing	N/A	N/A	N/A	N/A	VOC	10 CSR 10-5.330
EPN-6 Process materials	Phosphate Process	Existing	N/A	N/A	N/A	N/A	VOC	NA
EPN-6 Process materials	Fluid Fill (e.g. gasoline, Fuel Oil, automatic transmission fluid, coolant, windshield washer fluid, refrigerant)	Existing	N/A	N/A	N/A	N/A	VOC	NA
EPN-6 Process materials	Misc Process Materials (e.g. materials used for boiler treatment, wastewater treatment, and gases (CO <sub>2</sub> , O <sub>2</sub> , N <sub>2</sub> , acetylene, etc.))	Existing	N/A	N/A	N/A	N/A	VOC	NA
EPN-6 Process materials	Misc Maintenance Materials (e.g. oils and lubricants for process equipment and conveyors, welding rods, and fluxes, housekeeping products)	Existing	N/A	N/A	N/A	N/A	VOC	NA
EPN-6 Process materials	Misc Maintenance Paint	Existing	N/A	N/A	N/A	N/A	VOC	NA

Attachment A: Equipment List								
Source Description	Emission Unit Description	Existing New Modified	Pre- Approved Change Category	Start of Construction	Start of Operation	Date of Removal	Pollutants	Applicable VOC Requirements
EPN-7 Cleaning Solvents	Purge solvents used to clean paint lines (mainly EPN-2 and EPN-3)	Existing	N/A	N/A	N/A	N/A	VOC	10 CSR 10-5.330
EPN-7 Cleaning Solvents	Booth Cleaning Materials	Existing	N/A	N/A	N/A	N/A	VOC	10 CSR 10-5.330
EPN-8 Powerhouse	Natural Gas Fired Boiler 2 248 MMBtu/hr	Existing	N/A	N/A	N/A	N/A	All Pollutants	NA
EPN-8 Powerhouse	Natural Gas Fired Boiler 3 248 MMBtu/hr	Existing	N/A	N/A	N/A	N/A	All Pollutants	NA
EPN-8 Powerhouse	Natural Gas Fired Boiler 4 248 MMBtu/hr	Existing	N/A	N/A	N/A	N/A	All Pollutants	NA
EPN-9 Plant-Wide Natural Gas Usage	ELPO NG Fired Oven 19.5 MMBtu/hr	Existing	N/A	N/A	N/A	N/A	All Pollutants	NA
EPN-9 Plant-Wide Natural Gas Usage	Primer Surfacer NG Fired Oven 20 MMBtu/hr	Existing	N/A	N/A	N/A	N/A	All Pollutants	NA
EPN-9 Plant-Wide Natural Gas Usage	Color Line 1 NG Fired Oven 16 MMBtu/hr	Existing	N/A	N/A	N/A	N/A	All Pollutants	NA
EPN-9 Plant-Wide Natural Gas Usage	Color Line 2 NG Fired Oven 14 MMBtu/hr	Existing	N/A	N/A	N/A	N/A	All Pollutants	NA
EPN-9 Plant-Wide Natural Gas Usage	Process Heaters (Misc) NG Fired Equipment	Existing	N/A	N/A	N/A	N/A	All Pollutants	NA

Attachment A: Equipment List								
Source Description	Emission Unit Description	Existing New Modified	Pre- Approved Change Category	Start of Construction	Start of Operation	Date of Removal	Pollutants	Applicable VOC Requirements
EPN-10 Stamping	“A” Press	Existing	N/A	N/A	N/A	N/A	VOC	NA
EPN-10 Stamping	“B” Press	Existing	N/A	N/A	N/A	N/A	VOC	NA

For purposes of Attachment A only, the following definitions apply:

- *Existing* means any emission unit that is installed at the time of permit issuance. Like-kind replacements of existing emission units, i.e. those replacements that would otherwise qualify as a like-kind replacement according to 10 CSR 10-6.061, *Construction Permits Exemptions*, are considered existing.
- *New* means a new emissions unit that is (or will be) newly constructed after the PAL effective date.
- *Modified* means an existing emission unit that is physically changed or de-bottlenecked such that the potential emissions of the emission unit is increased.

Attachment B – VOC Emissions from Existing, New or Modified Emission Units

Attachment B: VOC PAL Compliance Worksheet			
Source Description	Equipment Description	Approved PAL Compliance Method	VOC Emissions this month in tons
EPN-1 ELPO	Electro Deposition Dip Coating Process	Mass Balance	
EPN-2 Primer Surfacer	Exterior Prime Booth	Mass Balance or Auto Protocol	
EPN-3 Topcoat	Interior Prime Booth	Mass Balance or Auto Protocol	
	Color Line 1 Prep Booth	Mass Balance or Auto Protocol	
	Color Line 1 Spray Booth	Mass Balance or Auto Protocol	
	Color Line 2 Spray Booth	Mass Balance or Auto Protocol	
	Spot / Panel Repair	Mass Balance	
EPN-4 Final Repair	Spot Repair Booths	Mass Balance	
EPN-5 Miscellaneous Sealers and Adhesives	Adhesive	Mass Balance	
	Deadener	Mass Balance	
	Glass Bonding Primer	Mass Balance	
	Weatherstrip adhesive	Mass Balance	
EPN-6 Process materials	Phosphate Process	Mass Balance	
	Fluid Fill	Mass Balance	
	Misc Process Materials	Mass Balance	
	Misc Maintenance Materials	Mass Balance	
	Misc Maintenance Paint	Mass Balance	
EPN-7 Cleaning Solvents	Purge solvents used to clean paint lines	Mass Balance	
	Booth Cleaning Materials	Mass Balance	
EPN-8 Powerhouse	Natural Gas Fired Boiler 2	5.5 lbs VOC per million cubic feet natural gas	
	Natural Gas Fired Boiler 3	5.5 lbs VOC per million cubic feet natural gas	
	Natural Gas Fired Boiler 4	5.5 lbs VOC per million cubic feet natural gas	
EPN-9 Plant-Wide Natural Gas Usage	ELPO Natural Gas Fired Oven	5.5 lbs VOC per million cubic feet natural gas	
	Primer Surfacer Natural Gas Fired Oven	5.5 lbs VOC per million cubic feet natural gas	
	Color Line 1 Natural Gas Fired Oven	5.5 lbs VOC per million cubic feet natural gas	
	Color Line 2 Natural Gas Fired Oven	5.5 lbs VOC per million cubic feet natural gas	
	Misc Natural Gas Fired Equipment	5.5 lbs VOC per million cubic feet natural gas	
EPN-10	“A” Press	Mass Balance	

Attachment B: VOC PAL Compliance Worksheet			
Source Description	Equipment Description	Approved PAL Compliance Method	VOC Emissions this month in tons
Stamping	"B" Press	Mass Balance	
N/A	Tank emissions	TANKS program	
Add New and Modified Emission Units (Pre-Approved Changes) Below			
(a) Total Emissions for this Month, in Tons per month:			
(b) Total Emissions for this Month + previous 11 months, in Tons per year:			

**Instructions: This worksheet must include VOC emissions from all emission units operating during the PAL effective period, including all existing, modified or new emission units.**

(a) Record the total monthly VOC emissions total in Tons per month;  
Calculate the new 12-month VOC emissions total. **A 12-Month VOC emissions total (b) of less than 1,002.5 tons indicates compliance.**

Attachment C – Emissions from Pre-Approved Changes

(a) Emission Unit			(b) Actual Emissions (tons per month)							
Pre-Approved Change Category	EIQ Source Description	Equipment Description	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	Lead	CO <sub>2e</sub>
(c) Total Emissions for this Month, in Tons per month:										
(d) Current 12-month Total Emissions in tons per year:										
(e) Regulatory Thresholds (tons per year)			25.0	15.0	10.0	40.0	40.0	100.0	0.6	75,000.0

- (a) List all emission units constructed or modified during the PAL effective period as indicated on Attachment A  
(b) Calculate this month's actual emissions, considering controls, for all pollutants except HAP and VOC  
(c) Sum all of this month's emissions for all emission units  
(d) Sum (c) + previous 11 months. Emissions less than the regulatory thresholds (e) indicates compliance.

Attachment D – Pre-Approved Changes

Attachment D: Table of Pre-Approved Changes						
Category	Process Step	New Construction or Modification to Existing Equipment	Pollutants	Applicable Federal Regulations	Applicable State Regulations	Approved PAL Compliance Method
1	Stamping	New Stamping Operations using Natural Gas and/or Propane	All Pollutants	N/A	10 CSR 10-6.405	Emission Factor
2	Body	Welding and/or Grinding Equipment	PM	N/A	10 CSR 10-6.400	N/A
3	Body	Sealer and Adhesive Application Equipment	VOC, HAP, PM	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.400	Mass Balance
4	Body	Sealers/Adhesives Application Equipment	VOC, HAP	40 CFR 63 (III)	10 CSR 10-5.330	Mass Balance
5	Body	Sealers/Adhesives Application Automation	VOC, HAP	40 CFR 63 (III)	10 CSR 10-5.330	Mass Balance
6	Body	Sealer Oven using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (III)	10 CSR 10-6.405	Emission Factor
7	Body	Sealers/Adhesives Emission Control Equipment using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
8	Body	High Bake, Low Bake & No Bake Sealer Adhesives and Foam Applicator Equipment	VOC, HAP	40 CFR 63 (III)	10 CSR 10-5.330	Mass Balance
9	Body	High Bake, Low Bake & No Bake Sealer Adhesives and Foam Oven using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (III)	10 CSR 10-6.405	Emission Factor
10	Body	High Bake, Low Bake & No Bake Sealer Adhesives and Foam Emission Control Equipment using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
11	Body Phosphate Pretreatment /	Tanks, Washers, Spray Zones to Prepare Vehicle Metal for Coating Operations	VOC, HAP, PM	NA	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance

**Attachment D: Table of Pre-Approved Changes**

Category	Process Step	New Construction or Modification to Existing Equipment	Pollutants	Applicable Federal Regulations	Applicable State Regulations	Approved PAL Compliance Method
	Thin Film					
12	ELPO	Tanks (Dip and Rinse)	VOC, PM	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
13	ELPO	ELPO Oven Burners using Natural Gas or Propane	All Pollutants	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
14	ELPO	Emission Control Equipment using Natural Gas or Propane	All Pollutants	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
15	Primer Surfacers	New Applicators or Automation Equipment	VOC, HAP, PM	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
16	Primer Surfacers	Primer Surfacers Booth(s)	VOC, HAP, PM	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance or Auto Protocol
17	Primer Surfacers	Primer Surfacers Oven and Burners using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (III)	10 CSR 10-6.405	Emission Factor
18	Primer Surfacers	Purge Solvent Recover Equipment	VOC, HAP	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-5.330	Mass Balance
19	Primer Surfacers	Emission Control Equipment using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
20	Topcoat	New Applicators or Automation Equipment	VOC, HAP, PM	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
21	Topcoat	Construction of New Topcoat Booths	VOC, HAP, PM	40 CFR 63 (III) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance or Auto Protocol

**Attachment D: Table of Pre-Approved Changes**

Category	Process Step	New Construction or Modification to Existing Equipment	Pollutants	Applicable Federal Regulations	Applicable State Regulations	Approved PAL Compliance Method
22	Topcoat	Topcoat Oven and Burners using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII)	10 CSR 10-6.405	Emission Factor
23	Topcoat	Purge Solvent Recover Equipment	VOC, HAP	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-5.330	Mass Balance
24	Topcoat	Emission Control Equipment using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
25	Primer Surfacers/Topcoat	Anti-Chip Coating Booths, Application Equipment and Bake Ovens	VOC, HAP, PM	NA	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
26	Primer Surfacers/Topcoat	Construction of New Spot Repair Booths	VOC, HAP, PM	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
27	Primer Surfacers/Topcoat	New Spot Repair Applicators or Automation of Spot Repair Equipment	VOC, HAP, PM	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
28	Primer Surfacers/Topcoat	Spot Repair Ovens using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
29	Final repair	Construction of New Final Repair Booths	VOC, HAP	40 CFR 63 (IIII)	10 CSR 10-5.330	Mass Balance
30	Final repair	New Applicators or Automation Equipment	VOC, HAP, PM	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
31	Final repair	Repair Ovens using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII)	10 CSR 10-6.405	Emission Factor
32	Paint	High Bake, Low Bake & No Bake Sealer, Foam and Adhesives Applicator Equipment	VOC, HAP	40 CFR 63 (IIII)	10 CSR 10-5.330	Mass Balance

**Attachment D: Table of Pre-Approved Changes**

Category	Process Step	New Construction or Modification to Existing Equipment	Pollutants	Applicable Federal Regulations	Applicable State Regulations	Approved PAL Compliance Method
33	Paint	High Bake, Low Bake & No Bake Sealer, Foam and Adhesives Oven using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII)	10 CSR 10-6.405	Emission Factor
34	Paint	High Bake, Low Bake & No Bake Sealer, Adhesives and Foam Emission Control Equipment using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
35	Assembly /Paint	Cavity Wax Application Equipment and Automation	VOC, HAP, PM	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
36	Assembly /Paint	Deadener New Applicators or Automation Equipment	VOC, HAP, PM	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
37	Assembly /Paint	Sprayable Bedliner Oven using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
38	Assembly /Paint	Sprayable Bedliner Emission Control Equipment using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
39	Assembly	High Bake, Low Bake & No Bake Sealer, Foam Adhesives Oven using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII)	10 CSR 10-6.405	Emission Factor
40	Assembly	High Bake, Low Bake & No Bake Sealer, Adhesives and Foam Emission Control Equipment using Natural Gas and/or Propane	All Pollutants	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.405	Emission Factor
41	Assembly	High Bake, Low Bake & No Bake Sealer, Foam and Adhesives Applicator Equipment	VOC, HAP	40 CFR 63 (IIII)	10 CSR 10-5.330	Mass Balance
42	Assembly	Roll Test / Dynamometer Vehicle and Engine Test Booths	VOC, HAP, PM	NA	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
43	Assembly	New Glass Install Applicators or Automation Equipment	VOC, HAP, PM	40 CFR 63 (IIII) 40 CFR 60 (MM)	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance

**Attachment D: Table of Pre-Approved Changes**

Category	Process Step	New Construction or Modification to Existing Equipment	Pollutants	Applicable Federal Regulations	Applicable State Regulations	Approved PAL Compliance Method
44	Assembly	Fluid Fill Dispensing Equipment and Abatement Equipment	VOC, HAP	N/A	N/A	Mass Balance
45	Assembly	Installation of New Fluid Fill Tanks Underground Storage Tanks and/or Aboveground Storage Tanks	VOC, HAP	N/A	N/A	TANKS
46	Assembly /Paint	Sprayable Bedliner Booth and Application Equipment	VOC, HAP, PM	40 CFR 63 (IIII)	10 CSR 10-5.330 10 CSR 10-6.400	Mass Balance
47	Powerhouse	Installation of Boilers using Natural Gas, Propane, or Fuel Oil	All Pollutants	N/A	10 CSR 10-6.405	Emission Factor
48	Maintenance	Construct Booths for Maintenance Painting, Cutting, Grinding, Machining Woodworking	VOC, HAP,PM	NA	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
49	Maintenance	Construction / Operation of Carrier Cleaning Booth	VOC, HAP, PM	NA	10 CSR 10-6.400 10 CSR 10-5.330	Mass Balance
50	Plantwide	Installation of Miscellaneous Products Tanks Underground Storage Tanks and/or Aboveground Storage Tanks	VOC, HAP	N/A	N/A	TANKS
51	Plantwide	Air Supply Houses	All Pollutants	N/A	10 CSR 10-6.405	Emission Factor
52	Plantwide	Natural Gas and/or Propane Heaters	All Pollutants	N/A	10 CSR 10-6.405	Emission Factor
53	Plantwide	Water Heaters (Natural Gas and/or Propane)	All Pollutants	N/A	10 CSR 10-6.405	Emission Factor
54	Plantwide	Emergency Generators (Natural Gas, Fuel Oil, or Gasoline)	All Pollutants	40 CFR 60 (IIII) 40 CFR 60 (JJJJ) 40 CFR 63 (ZZZZ)	N/A	Emission Factor

**Attachment D: Table of Pre-Approved Changes**

Category	Process Step	New Construction or Modification to Existing Equipment	Pollutants	Applicable Federal Regulations	Applicable State Regulations	Approved PAL Compliance Method
55	Plantwide	Insignificant Emission Unit <sup>[1]</sup>	Any	N/A	N/A	Mass Balance Or Emission Factor
56	Plantwide	Like-Kind Replacements	Existing	Existing	Existing	Existing

40 CFR 60 (MM) = 40 CFR 60, Subpart MM, Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations

40 CFR 60 (III) = 40 CFR 60 Subpart III, Standards of Performance for Stationary Compression Ignition Internal Combustion

40 CFR 60 (JJJ) = 40 CFR 60, Subpart JJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

40 CFR 63 (III) = 40 CFR 63 Subpart III, National Emission Standard for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks

40 CFR 63 (ZZZZ) = 40 CFR 63, Subpart ZZZZ, National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

<sup>1</sup>Insignificant Emission Unit means an activity or emission unit in which the only applicable requirement would be to list the requirement in an operating permit application under 10 CSR 10-6.065 and is also listed in 10 CSR 10-6.061 as exempt or excluded from construction permit review under 10 CSR 10-6.060.

### Attachment E – Example Calculations when using Abatement

Note: This example is intended to summarize the Auto Protocol procedures and is for informational purposes only. Any differences between the example and the Auto Protocol method are unintentional, and if differences exist then the Auto Protocol shall take precedence. *Auto Protocol* means the EPA document (EPA-453/R-08-002) entitled, Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer- Surfacer and Topcoat Operations, (September 2008)

Calculation	Step	Description	Units	Paint A	Paint B	Paint C
See Below	A	Paint Usage	gal	10	5	20
See Below	B	Paint Percent Solids by Volume	%	46.03	38.36	47.24
See Below	C	Paint Formula VOC Content	lb VOC/gal	4.01	4.6	3.88
See Below	D	Paint Analytical VOC Content	lb VOC/gal	4.25	4.78	4.13
See Below	E	Solvent (thinner) Usage	gal	0.2	0.01	0
See Below	F	Solvent (thinner) VOC Content	lb VOC/gal	7.91	7.91	7.91
See Below	G	Transfer Efficiency	%	78	78	78
See Below	H	Oven Solvent Loading	lb VOC/gal csa	3.03	3.03	3.03
See Below	J	Destruction Efficiency	%	95.7	95.7	95.7
$(G \times A) / (A + E)$	K	Calculate (paint + thinner ) Percent Solids by Volume	%	45	38	47
$[(C \times A) + (F \times E)] / (A + E)$	L	Calculate (paint + thinner ) Formula VOC Content	lb VOC/gal	4.09	4.61	3.88
$[(D \times A) + (F \times E)] / (A + E)$	M	Calculate (paint + thinner ) Analytical VOC Content	lb VOC/gal	4.32	4.79	4.13
$A + E$	N	Calculate (paint + thinner ) Usage	gal	10.20	5.01	20.00
$N \times K$	O	Calculate Volume Solids Sprayed	gal	4.60	1.92	9.45
$O \times G$	P	Calculate Volume Solids Applied	gal csa	3.59	1.50	7.37
$[L \times (1-G)] + (M \times G)$	Q	Calculate VOC Generated per Gallon (paint + thinner ) Used	lb VOC/gal	4.27	4.75	4.08
$R = N \times Q$	R	Calculate VOC Generated	lb VOC	43.55	23.78	81.50
$S = H \times J \times P$	S	Calculate VOC Abated	lb VOC	10.41	4.34	21.37
$T = R - S$	T	Calculate VOC Emitted	lb VOC	T1 = 33.14	T2 =19.44	T3 =60.13
Total VOC emitted = T1 + T2 +T3 = 112.3 lbs						

A = Measure the paint usage in gallons (gal)

B = Obtain the paint percent (%) solids by volume from the supplier

C = Obtain the paint formula VOC content (lb VOC per gal) from the supplier

D = Obtain the paint analytical VOC content (lb VOC per gal) from the supplier

E = Measure the solvent usage in gallons

F = Obtain the solvent VOC content (lb VOC per gal) from the supplier

G = Measure the transfer efficiency according to the Auto Protocol, Section 18 "Transfer Efficiency Test Procedure – In Plant"

H = Measure the oven solvent loading lb VOC per gal coating solids applied (lb/gal csa) according to the Auto Protocol Section 23, "Test Procedures for Determining Exhaust Control Device VOC Loading Capture Efficiency) by Stack Test per EPA Method 204 or Alternative Methods"

J = Measure the destruction efficiency (%) according to the Auto Protocol Section 22, "Test Procedures for Determining Oxidizer or Concentrator Control Device Efficiency"

Attachment F - CO<sub>2</sub>e Compliance Worksheet

This sheet covers the period from \_\_\_\_\_ to \_\_\_\_\_.  
(month, year) (month, year)

	Powerhouse Natural Gas Usage			Total
	Column 1	Column 2	Column 3	Column 4
Month/Year	Monthly Amount of Natural Gas Combusted (MMSCF)	Emission Factor <sup>1</sup> (tons CO <sub>2</sub> e per MMSCF)	Monthly CO <sub>2</sub> e Emissions from Natural Gas <sup>2</sup> (tons)	12-Month CO <sub>2</sub> e Emissions <sup>3</sup> (Tons/Year)
		60.14		
		60.14		
		60.14		
		60.14		
		60.14		
		60.14		
		60.14		
		60.14		
		60.14		
		60.14		
		60.14		
		60.14		

- 1 The composite CO<sub>2</sub>e emission factor (EF) calculated by multiplying the individual EF for CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> by their respective 100-year Global Warming Potential (GWP) and summing the results. The EF for each pollutant are 53.02 kg CO<sub>2</sub>/MMBtu (116.889 lb/MMBtu), 0.0001 kg N<sub>2</sub>O/MMBtu (0.0002205 lb/MMBtu), and 0.001 kg CH<sub>4</sub>/MMBtu (0.002205 lb/MMBtu). Using the high heating value of 1,028 MMBtu/MMscf to convert the EF to lb/MMscf, the following are obtained: 120,161.89 lb CO<sub>2</sub>/MMscf, 0.02267 lb N<sub>2</sub>O/MMscf, and 2.267 lb CH<sub>4</sub>/MMscf.

$$\begin{aligned} \text{CO}_2\text{e emission factor (tons/MMcf)} &= [(120,161.89 \text{ lb CO}_2\text{/MMcf} \times 1 \text{ lb CO}_2\text{/CO}_2\text{e}) \\ &\quad + (0.2267 \text{ lb N}_2\text{O/MMcf} \times 310 \text{ lb CO}_2\text{e/ lb N}_2\text{O}) \\ &\quad + (2.267 \text{ lb CH}_4\text{/MMcf} \times 21 \text{ lb CO}_2\text{e/ lb CH}_4)]/2000 \\ &= 60.14 \text{ tons CO}_2\text{e/MMcf} \end{aligned}$$

- 2 Column 3 = Column 1 \* Column 2

- 3 Column 4 = Column 3 + previous 11-months. **A 12-Month CO<sub>2</sub>e emissions total of less than 180,762 tons indicates compliance.**

## STATEMENT OF BASIS

### Installation Description

General Motors - Wentzville Assembly (GM-Wentzville) is an automobile body fabrication and general assembly plant. Body fabrication processes include: stamping, welding, and surface coating. General assembly activities include body-trim assembly, body-chassis marriage, fluid filling, and final testing. The site also includes a powerhouse consisting of 3 natural gas-fired boilers supplying steam to the assembly plant. Two separate Part 70 Operating Permits were issued to GM-Wentzville for the entire installation. A single P70 renewal permit is being issued consolidating the two P70 permits.

GM-Wentzville is located in St. Charles County, a nonattainment area for the 8-hour ozone standard and the PM<sub>2.5</sub> standard and an attainment area for all other criteria pollutants. GM-Wentzville is a major source of nitrogen oxides, volatile organic compounds, carbon monoxide, hazardous air pollutants and Greenhouse Gases (CO<sub>2</sub>e)

### Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application Project No. 2015-04-096, a renewal to the powerhouse, received April 28, 2015;
- 2) Part 70 Operating Permit Application Project No. 2003-07-030, a renewal to the assembly plant received July 1, 2003;
- 3) Project No. 2011-07-030 P70 Permit Significant Modification, received July 7, 2011;
- 4) Project No. 2012-12-019 P70 Permit Minor Modification, received December 11, 2012;
- 5) Project No. 2014-12-044 P70 Permit Minor Modification, received December 19, 2014;
- 6) 2014 Emissions Inventory Questionnaire, received April 28, 2015 (Internet Submittal);
- 7) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 8) Air Pollution Control Program Construction Permits:

Permit Number	Description
0580-003	Installation of powerhouse and automotive assembly plant.
0580-004	Revise conditions in Permit 0580-003.
0580-EPA	PSD permit for the powerhouse and automotive assembly plant.
0586-EPA	Revision of PSD permit to change emission limits.
1089-003	Switch to water-borne base coat and associated replacement of the main color paint booth with two parallel paint booths.
0387-007A	Clean-up of soil contamination
0294-015	Modification of painting operations to support the change from car to van assembly.
0396-011	Addition of metal fabrication equipment.
092001-007	Temporary portable air compressor

Permit Number	Description
052002-006	Temporary portable air compressor.
052012-009	Plant-wide applicability limit (PAL) permit for VOC.
032013-010	The conversion of four existing boilers from combusting coal (Boilers No. 2, 3, and 4) to exclusively natural gas.

### Process Description

The installation provided pollution totals which are summary grouped by category. Pollution from EPN-1 through EPN-7 are given as inventory totals, EPN-8 the Powerhouse, EPN-9 is the plant wide natural gas total and EPN-10 is a stamping plant.

### Existing Process Flow

Note: This table provides an outline of the existing process flow and is included for informational purposes only.

Process	Description	EQ
Stamping	Steel blanks pressed into parts	N/A
	Drawing compound applied as part of stamping process	EPN-10
Body Shop	Body Parts welded together	N/A
	Body Sealers applied	EPN-5
Paint Shop	Phosphate Process	EPN-6
	Prime/ELPO	EPN-1
	ELPO Oven	EPN-1
	ELPO Oven (Natural Gas Combustion)	EPN-9
	Sealer applied	EPN-5
	Basecoat Replacement (Interior Prime)	EPN-3
	Primer Surfacer (Exterior Prime) a.k.a. Guidecoat	EPN-2
	Primer Surfacer Oven	EPN-2
	Primer Surfacer Oven (Natural Gas Combustion)	EPN-9
	Topcoat (Basecoat and Clearcoat)	EPN-3
	Topcoat Ovens	EPN-3
	Topcoat Ovens (Natural Gas Combustion)	EPN-9
	Spot and Heavy Repair	EPN-3
	Purging-Cleaning of Booth Equipment	EPN-7
General Assembly Trim	Trim Parts added to body	N/A
	Deadener applied	EPN-5
	Windshield Install	EPN-5

<b>General Assembly Chassis</b>	Body-Chassis Marriage	N/A
	Fluid Fill	EPN-6
	Van Start	N/A
	Roll Test	N/A
<b>Final Process</b>	Final Paint Repair	EPN-4
	Mechanical Repair	N/A
	Electrical Repair	N/A

The process descriptions for the major sources which produce the pollution totals are characterized below.

- 1) EPN-1 Prime (ELPO) Coating System (EPN-1): The prime coating system (consisting prime ELPO dip tank and a natural gas fired 19.5 MMBtu/hr oven) is located in the Paint Shop. The painting coating system is an electrodeposition dip prime process known as ELPO. The vehicle is submerged in a tank consisting of a waterborne coating made up of a mixture of resins, pigments, and water. In the tank, the vehicle serves as one electrode and other specially designed tank components serve as the other electrode. Charged paint particles are deposited on the opposite charged metal body. Deposition continues until sufficient coating thickness is achieved. After leaving the dip tank, excess paint is removed by rinsing in a series of permeate rinses which cause the excess paint solids to cascade back to the dip tank. The vehicle is then rinsed with de-ionized water prior to entering the ELPO oven to cure the coating. Associated with the ELPO system are necessary support equipment such as filtration equipment, the resin and de-ionized water storage tanks and pigment storage totes.
- 2) EPN-2 Guidecoat (Primer Surfacer) System - Guidecoat (Primer Surfacer) booth  
The primer surfacer system is located in the Paint Shop. Prior to the primer surfacer (guidecoat) operation, the vehicle will pass through the prep operation. In the prep operation, the vehicle surface will be prepared to receive subsequent coatings. The prep operation, which is located in an exhausted enclosure at the entrance of the interior booth, consists of minor scuff sanding and manual wiping using solvent, tack cloths and/or mechanical feather dusters to remove dirt particles and/or otherwise prepare the surface for painting. On rare occasions, should a sand through to bare metal be found, a small amount of spot primer may be applied. After the prep operation, the basecoat replacement (BCR) and primer surfacer coatings will be applied.

The base coat replacement (BCR) coating is applied to the interior of the vehicle using automatic applicators in the interior booth. These coatings match the topcoat colors and are co-baked in the primer surfacer oven. The BCR coatings are applied to low visibility interior surface areas that require a color coat. Because this coating is part of the topcoat system, its emissions have been characterized together with the topcoat system.

Following the application of basecoat replacement coatings, the vehicle passes through the exterior booth where primer surfacer coatings and anti-chip material can be applied to the vehicle surface. These coatings can be applied using various types of applicators. The vehicle then travels through a flash zone, which allows it to properly flash before the coating is exposed to the oven heat. This is required to prevent defects in the paint film such as popping, etc.

All paint materials are supplied to the booth from the mix tanks in the paint mix room or satellite tanks via a central paint circulation system (tanks, pumps and piping). The paint is reduced as required with the appropriate reducers. These paint reducers are included as part of the VOC content of the paint (as Sprayed VOC or “as Applied”) when calculating the emissions from the primer surfacer system.

Following the Guidecoat application, the vehicle bodies proceed into a flash-off tunnel and then enter the Guidecoat oven. The oven has entrance and exit air seals where mechanical air curtains or bottom entry oven configurations assist in retaining the heat in the oven. At the exit end of the oven, after the air seal, the vehicle travels through a cool-down enclosure to quickly reduce the vehicle surface temperature. The oven has several oven zones that are then exhausted through catalytic oxidizers.

The abatement equipment for the Guidecoat (Primer Surfacers) System is identified in the following list:

Exterior Prime Booth Abatement System:

- 2- VOC Concentrators
- 1- Regenerative Thermal Oxidizer (RTO)

Guidecoat (Primer Surfacers) Oven:

- Prime Oven Zone 1 Catalyst
- Prime Oven Zone 2 Catalyst
- Prime Oven Zone 3 Catalyst
- Prime Oven Zone 4 Catalyst
- Prime Oven Zone 5 Catalyst
- Prime Oven Zone 6 Catalyst
- Prime Oven Zone 7 Catalyst
- Prime Oven Zone 8 Catalyst
- Prime Oven Zone 9 Catalyst

All the spray booths control particulate emissions from the paint overspray. For purposes of this application, the wet eliminators are considered an integral part of the spray booth. The spray booth operation cannot be sustained if the wet eliminator is not operational.

Purge solvents are used to clean the paint lines in order to prepare the lines for a color change and or to clean the applicators. The water in the wet eliminator is circulated between the paint booths and the sludge system. In the sludge system, the water is treated with chemicals to remove the paint sludge and the clean water is returned to the booths.

The booth walls, applicator and applicator support equipment, grating, etc., are periodically cleaned as well as the ovens with various solvents and or high pressure water. Various water reducible maskings may be applied to the booth walls and grease is applied to the exposed conveyor tracks to minimize cleaning efforts.

3) EPN-3 Topcoat System - Interior booth, Color #1 booth/flash/oven, Color #2 booth/flash/oven, Repair booth/oven

The topcoat system is comprised of two coating processes, basecoat and clearcoat. There are 2 identical topcoat lines that are comprised of paint booths and ovens. The booth/ovens in the topcoat system are the color 1, color 2, heavy panel repair, the spot repair, and the interior BCR booth. The descriptions of the booths/ovens are self-explanatory. The booths all operate the same and these specific functions are described in subsequent paragraphs.

Prior to each spray booth, the vehicle components pass through a prep operation to prepare the surface for painting. These prep operations are performed in exhausted enclosures located at the front of the spray booths. Some of the prep operations may also be performed at the exit end of the spray booth and/or oven (i.e. demask, etc.) and can generally be characterized as stated in the following paragraph.

The prep/finesse operation consists of minor scuff sanding and manual wiping using solvent, tack cloths and/or mechanical feather dusters to remove dirt particles and or otherwise prepare the surface for painting. On rare occasions, should a sand through to bare metal be found, a small amount of spot primer may be applied. If the vehicle has already received a topcoat (main color or tutone), or has to be repaired the coated area will be covered with a masking material such as paper or plastic wrap to protect it from overspray during subsequent painting operations. These vehicles are then processed through Color 1 or Color 2 booths and ovens. This masking material is removed in the demask areas. Finesse is the repair of minor surface blemishes in the final topcoat film by manually using polishing compounds.

The first of the two coatings that make up the topcoat is the basecoat. The basecoat is a water-based coating that is applied robotically. Following the basecoat application, vehicle bodies enter a heated flash zone (no paint area), which is incorporated in the booth design to allow the paint to properly flash before subsequent applications of solvent-borne clearcoat is applied. This is required to prevent defects in the paint film such as popping, etc. Following the basecoat heated flash, the painted vehicles receives an application of clearcoat, which is the second of the two coatings that make up the topcoat. Clearcoat is solvent-borne "clear" paint and it is applied robotically.

All paint materials are supplied to the booth from mix tanks in the paint mix room or satellite tanks via a central paint circulating system (tanks, pumps and piping). The paint is reduced as required with the appropriate reducers. These paint reducers are included as part of the VOC content of the paint ("as sprayed VOC or as applied") when calculating the emissions from the topcoat system.

Following the clearcoat application, jobs proceed into a flash-off tunnel. The vehicle bodies then enter the topcoat oven. The topcoat oven has entrance and exit air seals. At the exit end of the oven, the vehicle travels through a cool-down enclosure to quickly reduce the vehicle surface temperature. The oven has several oven zones that are exhausted through a catalytic oxidizer.

The abatement equipment for the Topcoat System is identified in the following lists:

Color 1 Heated Flash RTO

Color 1 Oven

Color 1 Oven Catalyst Zone 0

Color 2 Heated Flash RTO

Color 2 Oven

Color 2 Oven Catalyst Zone 1

Color 1 Oven Catalyst Zone 00	Color 2 Oven Catalyst Zone 2
Color 1 Oven Catalyst Zone 1	Color 2 Oven Catalyst Zone 3
Color 1 Oven Catalyst Zone 2	Color 2 Oven Catalyst Zone 4
Color 1 Oven Catalyst Zone 3	Color 2 Oven Catalyst Zone 5
Color 1 Oven Catalyst Zone 4	Color 2 Oven Catalyst Zone 6
Color 1 Oven Catalyst Zone 5	Color 2 Oven Catalyst Zone 7
Color 1 Oven Catalyst Zone 6	

All of the spray booths control particulate emissions from paint overspray. For purposes of this application, the wet eliminators are considered an integral part of the spray booth. The spray booth operation cannot be sustained if the wet eliminator is not operational.

Purge solvents are used to clean the paint lines in order to prepare the lines for a color change and to clean the applicators. The water in the wet eliminator is circulated between the paint booths and the sludge room. In the sludge room, the water is treated with chemicals to remove the paint sludge and the clean water is returned to the booths. The booth walls, applicator and applicator support equipment, grating, etc. is periodically cleaned as well as the ovens with various solvents and or high pressure water. Various water reducible maskings may be applied to the booth walls and grease is applied to the exposed conveyor tracks to minimize cleaning efforts.

After leaving the topcoat system, the vehicles are inspected for paint defects. If minor defects are identified, spot repairs are performed. Spot repairs consist of repairs to small areas, usually less than a few square inches. These repairs are made with various techniques such as finessing, with polishing compounds, touch-up brushes and/or airbrushes. If major paint defects are identified, the vehicle is sent through the repair areas and then sent through the color booths to be repainted.

- 4) EPN-4 Final Repair System (Spot repair booths): After general assembly, any paint defects are corrected in the final repair system that consists of a prep operation and spot repair facilities. Final repair operations are located on the final portion of the assembly line. Spot repairs consist of repairs to small areas, usually less than a few square inches. These repairs are made with various techniques such as finessing with polishing compounds; touch-up brushes and/or airbrushes and is performed in a spray area.

Due to the low bake oven requirements; the paint is catalyzed to allow it to cure at these temperatures. The catalyst material contains VOCs and is included as a solvent in the paint when determining the emissions. Scuff and/or heavy sanding are done in the prep operation and are listed as insignificant sources. On rare occasions, should sand through to bare metal occur, a spot primer may be applied. Miscellaneous solvents are also used in the prep operation.

- 5) EPN-5 Miscellaneous Sealers and adhesives (Deadener booth, Glass Primer, Transit Coating Application, B/S Weld-thru Sealer, Body Sealer/oven, Robotic Glass Sealer, multiple location activities): Various sealers, adhesives and fillers are used throughout the assembly process. These sealers, adhesives, and fillers are applied in the body shop, paint shop and general assembly are used in low volume specialty applications which have to meet either critical exposure conditions or Federal Motor Vehicle Safety Standards (MVSS). These low volume and specialty materials in general assembly are air-dried. Included in the sealer, adhesive, filler emission source is a sealant operation for vehicle glass installation.

- 6) EPN-6 Process Materials (Gasoline storage Tanks, Gasoline Fluid fill, Preclean operation, BS Hi-Lite booth, Maintenance Spray booth): The process materials Category covers a broad range of materials and operations such as bulk fluids (see fluid storage and fluid fill operations below), maintenance activities (cleanup and painting), pre-cleaner materials, and numerous booth supply materials.

• Virgin Purge Thinner	20,000 Gallons
• Reclaim Purge Thinner	20,000 Gallons
• Diesel	20,000 Gallons
• Antifreeze Coolant	20,000 Gallons
• Windshield Washer Fluid	12,000 Gallons
• Automatic Transmission Fluid	20,000 Gallons
• Power Steering Fluid	12,000 Gallons
• Oleum	4,500 Gallons
• Powerhouse Amine	750 Gallons

- 7) EPN-7 Miscellaneous Solvents (Solvent Cleaning and wipe off, Booth Cleaning Operation, Safety Kleen Parts Cleaner): Various solvents are used throughout the assembly process. These solvents are used in the body shop. Paint shop and general assembly functions performed using miscellaneous solvents include, but are not limited to preparing the vehicle body for painting, purging of internal paint lines, paint applicator/spraybooth/oven cleaning. Parts cleaning, and routine housekeeping requirements.

- 8) EPN-8 Powerhouse: The powerhouse operations include three natural gas-fired boilers which provide process and building steam to the automotive assembly plant. GM received Permit to Construct – Permit No. 032013-010 to modify Boilers 2, 3, and 4 to burn natural gas and remove the ability to burn coal. GM completed this work in November and December 18, 2014.

Permit to Construct 032013-010 states that CEMS is to be used to monitor NO<sub>x</sub> emissions. Since the facility is only burning natural gas in the boilers, it is no longer necessary to monitor SO<sub>2</sub> and opacity. GM will continue to use the CEMS to monitor NO<sub>x</sub> emissions from boiler operations.

In January 2014, the plant also partially dismantled Boiler 1 so that it could no longer be operated, so Boiler 1 is not included in this permit.

- 9) EPN-9 Plant Wide Natural Gas Usage (Paint Oven, ELPO oven, Sealer Oven, Primer Surfacer Oven, Color #1 oven, Color #2 oven, Repair Oven, Final Process Repair oven, Blu-Surf Grate Cleaning, Misc. process equipment): The assembly plant uses natural gas for process equipment on the vehicle assembly line and its ancillary support facilities. Process heat requirements generally include, but are not limited to makeup air units, paint ovens, door heaters, hot water heaters, and emission control devices such as oxidizers. Natural gas is distributed throughout the facility via a common gas piping distribution system. There are numerous natural gas burners associated with each paint curing oven, and there are multiple paint curing ovens at the facility. The quantity of natural gas used is metered at the main gas header entering the facility. The installation does not have meters to accurately allocate natural gas to each specific process. The emissions from natural gas combustion for process equipment have been defined as a single plant wide emission unit in this installation.

10) EPN-10 Stamping Plant (Metal Stamping lines): The stamping process consists of several transfer press lines. The transfer press stamps blanked sheet metal into formed parts through the use of successive pressing machines which utilize preformed pressing dies. Transfer press operations are automated and will not require worker manipulation of parts between each press station. Drawing compound is applied to the steel prior to being stamped. This is an oil/water-based material used to lubricate the steel panel and provide a smooth finish. The pressed parts will then be shipped to the body shop for use in metal assembly process lines.

### Updated Potential to Emit for the Installation and Reported Air Pollutant Emissions, in tons per year

Pollutants	Potential Emissions	Reported Emissions				
		2016	2015	2014	2013	2012
Particulate Matter $\leq$ Ten Microns (PM <sub>10</sub> )	90.61	28.53	27.19	25.84	34.40	42.30
Particulate Matter $\leq$ 2.5 Microns (PM <sub>2.5</sub> )	90.60	28.53	27.19	24.86	32.06	38.98
Sulfur Oxides (SO <sub>x</sub> )	2.79	0.48	0.45	36.64	186.55	337.19
Nitrogen Oxides (NO <sub>x</sub> )	364.24	80.01	75.27	94.56	195.46	269.09
Volatile Organic Compounds (VOC)	1,002.50	878.49	1,012.11	811.82	645.74	607.95
Carbon Monoxide (CO)	302.04	67.20	63.22	76.31	96.04	109.33
Hazardous Air Pollutants (HAPs)	1,025.41	4.38	4.00	14.78	38.36	54.93

- The potential emissions (PTE) for Volatile Organic Compounds (VOC's) are from the plant wide applicability limit in Construction Permit No. 052012-009, Plantwide Applicability Limitation (PAL) [Permit Conditions PW001].
- The reported emissions of VOC's in 2015 exceeded the permitted emission rate of the PAL permit. General Motors promptly self-reported the violation to the Compliance/Enforcement section and subsequently worked through the ramifications of this exceedance.
- The PTE for SO<sub>2</sub> is much less than any of the yearly reported emissions due to the change in fuel use from coal to natural gas.

### Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application Project No. 2015-04-096, a renewal to the powerhouse, received April 28, 2015;
- 2) Part 70 Operating Permit Application Project No. 2003-07-030, a renewal to the assembly plant received July 1, 2003;
- 3) Project No. 2011-07-030 P70 Permit Significant Modification, received July 7, 2011;
- 4) Project No. 2012-12-019 P70 Permit Minor Modification, received December 11, 2012;
- 5) Project No. 2014-12-044 P70 Permit Minor Modification, received December 19, 2014;

- 6) 2014 Emissions Inventory Questionnaire, received April 28, 2015 (Internet Submittal);
- 7) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 8) Air Pollution Control Program Construction Permits:

Permit Number	Description
0580-003	Installation of powerhouse and automotive assembly plant.
0580-004	Revise conditions in Permit 0580-003.
0580-EPA	PSD permit for the powerhouse and automotive assembly plant.
0586-EPA	Revision of PSD permit to change emission limits.
1089-003	Switch to water-borne base coat and associated replacement of the main color paint booth with two parallel paint booths.
0387-007A	Clean-up of soil contamination
0294-015	Modification of painting operations to support the change from car to van assembly.
0396-011	Addition of metal fabrication equipment.
092001-007	Temporary portable air compressor
052002-006	Temporary portable air compressor.
052012-009	Plant-wide applicability limit (PAL) permit for VOC.
032013-010	The conversion of four existing boilers from combusting coal (Boilers No. 2, 3, and 4) to exclusively natural gas.

#### **Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits**

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None.

#### **Other Air Regulations Determined Not to Apply to the Operating Permit**

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

- 1) 10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos*; and  
10 CSR 10-6.250, *Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements*

In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos*; and 10 CSR 10-6.250, *Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements* apply to this installation. The installation is subject to these regulations if they

undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

2) 10 CSR 10-6.405, *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating.*

This regulation does not apply to the boilers and process heaters in this facility because they burn only natural gas and are exempt according to 10 CSR 10-6.405(1)(C).

3) 10 CSR 10-5.455, *Control of Emissions from Industrial Solvent Cleaning Operations*

According to 10 CSR 10-5.455(1)(C)8.B. cleaning operations within the auto and light duty truck assembly coatings are not subject to the provisions of this rule.

4) 10 CSR 10-5.520, *Control of Volatile Organic Compound Emissions from Existing Major Sources*  
According to Section (1)(A) through (C), this rule does not apply to any installation that meets one the following:

- One or more rules under Division 10, Chapter 5, of the Code of State Regulations (CSR) applies to VOC emissions from a product process, or a raw material, intermediate or product tank;
- Is exempted from one or more rules under Division 10, Chapter 5, of the CSR as they apply to VOC emissions from a product process, or a raw material, intermediate or product tank;
- Is affected by any federal rulemaking promulgated under 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63 that applies to VOC emissions from a product process, or a raw material, intermediate or product tank;

This rule does not apply to General Motors LLC Wentzville Assembly because the installation meets the above criteria.

5) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*

- According to §6.400(1)(B)14. of this rule Coating operations equipped with a control system designed to control at least ninety-five percent (95%) of the particulate overspray are exempt from the requirements of this rule provided the system is operated and maintained in accordance with manufacturers' specifications or comparable maintenance procedures that meet or exceed manufacturers' specifications.

EPN-2 and EPN-3 are equipped with high velocity mist eliminators of control efficiencies of 98% are not subject to the requirements of this rule because the operations meet the above exemption criteria.

- According to §6.400(1)(B)16. of this rule, emission units that at maximum hourly design rate (MHDR) have an uncontrolled potential to emit less than the allowable emissions as calculated in paragraphs (3)(A)1. and (3)(A)2. of this rule are exempt from the requirements of this rule.

EPN-5: The particulate matter emission limit for this process is 22.74 lbs/hr. The uncontrolled emission rate for this process based on the MHDR (2580 lbs/hr) is 1.12 lbs/hr. Since the PM

uncontrolled potential to emit (PTE) is less than the allowable limit, EPN-5 is exempt from the requirements of this rule.

- At maximum design rates, the uncontrolled potential PM emission rate for EPN-4 is less the allowed exemption level of 10 CSR 10-6.400(1)(B)11. (i.e., 0.5 lbs/hr), therefore EPN-4 is not subject to the provisions of this rule.
- This rule does not apply to EPN-1 (ELPO) E-Coat Operation because it is a dip operation and does not have the potential to cause any emission of particulate matter.

### Construction Permit History

No revisions were made to construction permits for this installation:

### New Source Performance Standards (NSPS) Applicability

- 1) 40 CFR Part 60, Subpart K, Ka, Kb, *Standards of Performance for Storage Vessels for Petroleum Liquid*, does not apply to this facility because there are no storage vessels located at this facility that meet the construction date, volume and/or content criteria of the regulations.
- 2) 40 CFR Part 60 Subpart MM, *Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations*, applies to each prime coat operation, guide coat operation and topcoat operation as described in the permit.

EPN-1, Prime Coat (ELPO) System and EPN-2, Guidecoat (Primer Surfacer) System are subject to 40 CFR Part 60, Subpart MM; however, the LAER agreement establishes a more stringent VOC emission limitation of 0.16<sup>3</sup> (1.34 lb/gal) and 1.06<sup>4</sup> (8.82 lb/gal) kilograms per liter of applied coating solids instead of the 0.17 and 1.40 kilograms per liter of applied coating solids established in Subpart MM. The NSPS and LAER requirements were combined for the ELPO and Guidecoat operations with the more stringent VOC emission limitation included in the permit condition since it would not make a difference in the monitoring, reporting and record keeping requirements of Permit Condition (EPN-1 and EPN-2)-002.

- 3) 40 CFR Part 60, Subpart D, *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971*.  
The provisions of this subpart apply to each fossil-fuel-fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour) constructed or modified after August 17, 1971 and not covered under Subpart Da.

The powerhouse boilers are rated at less than 250 MMBtu/hr each, therefore, Boilers 2, 3, and 4 are not subject to this subpart.

- 4) 40 CFR Part 60, Subpart Da, *Standards of Performance for Electric Utility Steam Generating Units for Which Construction is commenced After September 18, 1978*.

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<sup>3</sup> 1.34 lb/gal = [1.34 lb/gal \* (kg/2.2 lb) \* (gal/3.79 l)] = 0.16 kg/l

<sup>4</sup> 8.82 lb/gal = [8.82 lb/gal \* (kg/2.2 lb) \* (gal/3.79 l)] = 1.06 kg/l

The provisions of this subpart apply to each electric utility fossil-fuel-(either alone or in combination with any other fuel) fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour) constructed or modified after September 18, 1978. None of the boilers are electric utility steam generating units as defined in this subpart, therefore this subpart does not apply to this installation.

5) *40 CFR Part 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.*

The provisions of this subpart apply to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).

Boiler 2, Boiler 3 and Boiler 4 rated at greater than 100 MMBtu/hr commenced construction in 1982, prior to the applicability date of this subpart, therefore the boilers are not subject to this subpart.

6) *40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.*

This subpart applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu/hr) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

None of the boilers has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu/hr) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

7) *40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

The computer Room (EG1) and Body Shop (EG2) Emergency Generators are subject to this regulation. It is included in this operating permit as Permit Condition (EG1 and EG2) - 001.

**Maximum Available Control Technology (MACT) Applicability**

1) *40 CFR Part 63, Subpart A — General Provisions*

Table 2 to 40 CFR Part 63, Subpart IIII, specifies the provisions of subpart A of Part 63 that apply to owners and operators of sources subject to the provisions of Subpart IIII.

2) *40 CFR Part 63, Subpart IIII – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks*

This subpart applies to new, reconstructed, or existing affected source that is located at a facility that applies topcoat to new automobile or new light-duty truck bodies or to body parts for new automobiles or new light-duty trucks and that is a major source, is located at a major source, or is part of a major source of hazardous air pollutants.

The affected sources are:

- All coating operations as defined in §63.3176;

- All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored or mixed;
- All manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials; and
- All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

- a) General Motors will use the compliance method specified in section 63.3091(b) which is the combined emissions from the primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesives operations (i.e. electrodeposition and adhesive and sealer materials that are not part of the glass bonding system are excluded from the grouping). The electrodeposition (ELPO) is excluded from the grouping per section 63.3092(a) since it contains no more than 1.0 percent by weight of any organic HAP and no more than 0.1 percent by weight of any organic HAP which is a carcinogen as specified in 29 CFR 1910.1200(d)(4). Therefore, the applicable emission limitation will be 1.10 pounds of HAPs per gallon of coating solids deposited.

Continuous compliance with the emission limitations will be demonstrated monthly using the applicable methods defined in 40 CFR Part 63, Subpart IIII, §63.3171. Continuous compliance with the operating limitations is not applicable since compliance is achieved without the use of add-on control device. Compliance Option Specified in § 63.3091(a) or (b):

General Motors will use the compliance method specified in section 63.3091(b) which is the combined emissions from the primer-surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesives operations (i.e. electrodeposition and adhesive and sealer materials that are not part of the glass bonding system are excluded from the grouping). The electrodeposition (ELPO) is excluded from the grouping per section 63.3092(a) since it contains no more than 1.0 percent by weight of any organic HAP and no more than 0.1 percent by weight of any organic HAP which is a carcinogen as specified in 29 CFR 1910.1200(d)(4). Therefore, the applicable emission limitation will be 1.10 pounds of HAPs per gallon of coating solids deposited.

Continuous compliance with the emission limitations will be demonstrated monthly using the applicable methods defined in 40 CFR Part 63, Subpart IIII, §63.3171. Continuous compliance with the operating limitations is not applicable since compliance is achieved without the use of add-on control device.

- b) §63.3094 What work practice:

A work practice plan was developed and put into effect on April 26, 2007, the initial compliance date. A copy of the work practice plan is maintained on site for agency review.

- 3) 40 CFR Part 63 Subpart T, *Halogenated Solvent Cleaning*, does not apply to the solvent cleaning since the solvent cleaning emission units do not use halogenated solvent as defined in 40 CFR 63.460.
- 4) 40 CFR Part 63 Subpart EEEE, *Organic Liquids Distribution*, applies to the Windshield Washer Fluid (Methanol) Tank located at this installation. However, the tank is exempt from control requirements due to the vapor pressure of the tank contents (annual average true vapor pressure is less than 27.6 kilopascals (4.0 psia)). If the vapor pressure exceeds this threshold, the tank must be

controlled. Only an initial notification and initial compliance report are required if there are no changes. These reports were submitted on May 27, 2004 and April 17, 2009.

- 5) 40 CFR Part 63 Subpart MMMM, *Surface Coating of Miscellaneous Metal Parts and Products*, does not apply due to 63.3881(c)(17)(d). The installation complies with MACT Subpart IIII in lieu of this rule.
- 6) 40 CFR Part 63 Subpart PPPP, *Plastic Parts and Products*, does not apply due to 63.4481(c)(16)(d). The installation complies with MACT Subpart IIII in lieu of this rule.
- 7) 40 CFR Part 63 Subpart CCCCCC, *Gasoline Dispensing Facilities*, applies to gasoline dispensing facilities located at an area source of HAPs. Since General Motors LLC Wentzville Assembly is a major source of HAPs, it is not subject to this regulation.
- 8) 40 CFR Part 63 Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*
  - a) This regulation applies to the following emission units which are natural gas fired only and is included in this permit under Permit Condition (EPN-8):

Equipment Description	Rated Heat Input Capacity (MMBtu/hr)	Installation Date
Boiler #2	248	1982
Boiler #3	248	1982
Boiler #4	248	1982

- b) The following natural gas fired ovens are part of the painting operation and thus are part of the affected source under the Auto MACT (40 CFR Part 63, Subpart IIII). According to §63.7491(h) of 40 CFR Part 63, Subpart DDDDD, any boiler or process heater that is part of the affected source subject to another subpart of 40 CFR Part 63 are not subject to Subpart DDDDD. Therefore the ovens are not subject to this subpart.

Equipment Description	Rated Heat Input Capacity (MMBtu/hr)	Installation Date
ELPO Oven	19.5	1982
Interior & Primer Surfacer Oven	20.0	1982
Color 1 Oven	16.0	1982
Color 2 Oven	14.0	1982

- 9) 40 CFR Part 63 Subpart JJJJJ, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*  
This regulation does not apply to the boilers and process heaters at this facility because it is a major source of hazardous air pollutants (HAPS).

10) 40 CFR Part 63 Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

This regulation applies to the following Emergency equipment and is included in the operation permit under Permit Condition (EG3 through EG5) -002 and (EG7 and EG8) - 002:

Equipment Description	Rated HP	Fuel Type	Ignition Type	Purchase Date
Paint Emergency Generator	335	Diesel	CI	1982
Trim Emergency Generator	335	Diesel	CI	1982
Chassis Emergency Generator	335	Diesel	CI	1982
A47 Fire Pump Engine	188	Diesel	CI	1982
Powerhouse Fire Pump Engine	288	Diesel	CI	1982

**National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

See “Other Air Regulations Determined Not to Apply to the Operating Permit” section of the statement of basis

**Compliance Assurance Monitoring (CAM) Applicability**

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

For the Wentzville Assembly facility, there are three sources that have potential volatile organic compounds (VOC's) emissions greater than the major source level prior to control and thus are potentially subject to CAM under 40 CFR Part 64. These sources are EPN-01 (ELPO), EPN-02 (Primer Surfacer) and EPN-03 (Topcoat). Since the compliance demonstration is performed using the NSPS Subpart MM, the installation does not use add on controls to achieve the VOCs emissions limits. Therefore CAM is not applicable since none of the emission units require the control equipment for compliance with the emission limit.

Although EPN-02 and EPN-03 also generate some particulate emissions, the particulate emissions are controlled by the spraybooth wet eliminator section which is inherent process equipment and not considered to be a control device subject to CAM. The wet eliminators have been integral components of paint spray booths long before air pollution regulations were promulgated because the primary function is to collect paint overspray. Removal of paint overspray is extremely critical to maintaining a quality paint finish and a safe and proper employee work environment. Of equal significance, without these integral wet eliminators, the paint overspray would build up (form sludges) in the spraybooth to a point that painting would become impossible.

**Greenhouse Gas Emissions**

Potential emissions of greenhouse gases (CO<sub>2</sub>e) for this installation are calculated to be 234,326 tons. There are no currently issued GHG regulations applicable to this installation. Missouri regulations do

not require the installation to report CO<sub>2</sub>e emissions in the Missouri Emissions Inventory Questionnaire; therefore, the installation's CO<sub>2</sub>e emissions were not included within this permit.

### **Other Regulatory Determinations**

1) Resistance Spot Welding and Metal Grinding Operations:

Due to the nature of the resistance spot welding and metal grinding operations, small quantities of particulates may be formed. These particulates are relatively heavy and tend to settle in the vicinity of the specified operation(s) being performed. Thus, there are no quantifiable particulate emissions from the resistance spot welding and grinding operations. These activities are listed as emission units without limitation.

2) The multi stage phosphate system (source 1A016) is insignificant because it uses materials that do not contain VOC and does not emit particulate emissions. The ventilation on this system is designed to remove water vapor.

3) The vehicle startup and roll test is considered a mobile source and exempt by the application

4) The feather duster (source 1A0170) is a cylindrical drum that is covered with ostrich feathers. As the vehicle passes under the feather duster, a slight vacuum is pulled on the drum to aid in providing a lint free vehicle surface prior to painting. The feathers trap any lint that they may collect from the vehicle surface. It is not believed that the minor amount of lint that is collected could result in any measurable amount of PM emissions. The operation is considered insignificant.

5) The wet/dry sanding booths (light duty assembly line) (source 1A018) are used to remove blemishes from the paint surface. Generally the blemish is removed by wetting the vehicle surface and the sandpaper. The purpose of the operation is to improve paint imperfections, not remove paint. The PM emissions are considered negligible.

6) The spot sanding and painting (light duty assembly line) (source 1A020)- in the paint shop, minor touch up may be made to the paint surface if it is in an inconspicuous area such as a door jam and could consist of a slight scuffing of the surface and a repair of the paint using touch up paint and a brush or an air gun. Since the area is part of the paint shop, any paint used has already been accounted for in EPN 3 or 4.

7) The flouorocarbon R-134A storage Tank (source 1A029) and the sulfuric acid storage tank source (1A 030) contain materials that are considered to be non-regulated pollutants.

8) The miscellaneous chemical tanks emission source(1A032) and the caustic storage tank(1A034) are day tanks with capacities well below 40,000 gallons are therefore not subject to 40 CFR subparts K, Ka or Kb.

9) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*

This regulation was not applied to the boilers and process heaters at this facility because they burn only natural gas and while the limits are still applicable to these units, it is very unlikely that the burning of natural gas as fuel could ever exceed the emission limits.

10) 10 CSR 10-6.260, *Restriction of Emissions of Sulfur Compounds* and  
10 CSR 10-6.261, *Control of Sulfur Dioxide Emissions*.

10 CSR 10-6.260 was rescinded on November 30, 2015 and replaced by 10 CSR 10-6.261; however, the provisions of 10 CSR 10-6.260 currently remain in the State Implementation Plan and thus are federally enforceable and applicable to the installation. The provisions of 10 CSR 10-6.260 will expire and the provisions of 10 CSR 10-6.261 will become federally enforceable once 10 CSR 10-6.261 is incorporated into the federally-approved SIP as a final EPA action

- a) 10 CSR 10-6.260(3)(A)2. and 10 CSR 10-6.261(3)(C) apply to all the “new” emergency generators at GM-Wentzville Assembly Plant that use fuel oil. There are no “existing” emergency generators at GM-Wentzville Assembly Plant. (Existing sources in the St. Louis metropolitan area as defined in 10 CSR 10-6.020: any equipment, machine, device, article, contrivance, or installation that is existing, installed, or under construction on March 24, 1967.)

GM is in compliance with the SO<sub>2</sub> emissions limit of 500 ppmv averaged on any consecutive 3-hour period and SO<sub>3</sub> /H<sub>2</sub>SO<sub>4</sub> limit of 35 mg/m<sup>3</sup> averaged on any consecutive 3-hour period for fuel oil of 10 CSR 10-6.260(3)(A)2 and also with the 8,812 ppm sulfur limit of 10 CSR 10-6.261(3)(C). GM has and will continue to purchase low sulfur fuel oil (i.e., ≤ 15 ppmv sulfur content) to meet the limit of this rule.

- b) The power house boilers (EP-8) and Emission Group EPN-9 Plant Wide Natural Gas Usage - All combustion equipment identified as EP-8 and EPN-9 uses pipeline grade natural gas. According to 10 CSR 10-6.260(1)(A)(2) and 10 CSR 10-6.261(1)(A), natural gas and liquefied petroleum gas (propane) fired sources are exempt from the requirements of these rules

11) 10 CSR 10-5.220, *Control of Petroleum Liquide Storage, Loading and Transfer*.

On May 29, 2014, the Missouri Air Conservation Commission held a public hearing concerning the proposed amendment to 10 CSR 10-5.220. General Motors commented that they are concerned with the change to paragraph (3)(C)4., which prohibits the use of aboveground gasoline storage tanks at gasoline dispensing facilities with a capacity greater than one thousand (1,000) gallons. The General Motors assembly plant uses an initial fueling system with two (2) twenty thousand (20,000) gallon storage tanks for initial fueling of vehicles assembled at the plant. The system has been in place as an integral part of the assembly process since the plant was built in the early 1980's. They believe the proposed language does not take into account their existing tanks, and they provided suggested text changes intended to ensure their tanks will not be prohibited.

In response to the comment the Air Pollution Control Program stated that the prohibition on ASTs greater than one-thousand (1,000) gallons in paragraph (3)(C)4. of the proposed amendment only applies to gasoline dispensing facilities (GDFs) in the St. Louis ozone non-attainment area. ASTs at facilities other than GDFs are not affected by the prohibition. The General Motors assembly plant is not a GDF, therefore the ASTs at that facility are not affected by the prohibition. To clarify the distinction between GDFs and other facilities that operate gasoline dispensers, the definition of Gasoline Dispensing Facility in 10 CSR 10-6.020 Definitions and Common Reference Tables is being revised in a separate rulemaking to clarify that vehicle assembly plants and gasoline distribution facilities are not considered GDFs.

**Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

## Response to Public Comments

The draft P70 Operating Permit, Project 2015-04-096, General Motors LLL Wentzville Assembly Plant (183-0076) was placed on public notice as of June 30, 2017, for a 30-day comment period. The public notice was published on the Department of Natural Resources' Air Pollution Control Program's web page at: <http://dnr.mo.gov/env/apcp/permit-public-notice.htm> on Friday, June 30, 2017. The Air Pollution Control Program received comments from Ms. Midge Winkler of General Motors (GM) and Mark A. Smith, Air Permitting and Compliance Branch Chief for EPA Region VII.

### **The following eleven comments were received on July 21, 2017 from Ms. Midge Winkler of General Motors:**

#### **Comment #1: Installation Equipment Listing**

Emission Units without Limitations:

The final parenthesis is missing on line 3 on page 5. Feather Duster (source 1A0170)

*Response to Comment: The typographical error has been corrected.*

#### **Comment #2: Plant Wide Emission Limitations**

Permit Condition PW001

Notification and Reporting:

Condition 3)b) requires deviations associated with Permit Condition PW001, and 10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements Condition 2)e) in the General Conditions also requires the reporting of deviations. This would require the facility to submit two deviation reports for a single deviation. GM requests that Condition 3)b) be changed such that the deviation reporting under Condition 2)e) can satisfy the reporting for Condition 3)b) as long as all the required information is contained in the report. Please update Condition 3)b) as follows:

3)b) The permittee shall submit a deviation report to the Air Pollution Control Program, Compliance and Enforcement Section no later than 30 days after any deviations or exceedance of permitting requirements. A deviation reported under Condition 10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements 2)e) of the General Conditions meets the reporting requirements under this condition as long as the deviation report contains the following information:

- i) Specification of the site;
- ii) Identification of the owner and operator;
- iii) The permit number and the project number;
- iv) The permit requirement that experienced the deviation or that was exceeded;
- v) Emissions resulting from the deviation or the exceedance; and
- vi) A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

*Response to Comment: The change to the draft has been made as a result of this comment.*

#### **Comment #3: Emission Unit Specific Emission Limitations**

Permit Condition (EPN-1 through EPN-3) - 002

Emission Limitations

GM requests that the repeated permit citation in Condition 3) be removed:

- 2) The Permittee shall comply with the following Best Available Control Technology (BACT) restriction originally required by permit number 0580-004 and amended by permit number 1089-003. Emissions of particulate matter less than ten microns in diameter (PM<sub>10</sub>) from the major spray booth (EPN-2 and EPN-3) stack (ST-200) shall not exceed 2.0 grains per 1000 dry standard cubic feet of air exhausted.

**Response to Comment:** The citation has been removed as requested.

**Comment #4:** Permit Condition (EPN-8) - 001

Operational Limitations

GM requests that the repeated citation in Condition 1)a) be removed:

1) Operation of Continuous Emissions Monitors (CEMs):

- a) The Permittee shall install, certify, operate, calibrate, test and maintain continuous emission monitors (CEMs) to ensure that the NO<sub>x</sub> emission rate is less than 140 pounds per million standard cubic feet (mmscf) of natural gas.

**Response to Comment:** The citation has been removed as requested.

**Comment #5:** Permit Condition (EPN-8) - 002

Monitoring

GM requests that the typo in Condition 2)a) be corrected:

- 2) For units operating CEMS for estimating NO<sub>x</sub> emissions, the following requirements shall apply:

- a) Compliance shall be measured on a 30-day rolling average;

**Response to Comment:** The typographical error has been corrected.

**Comment #6:** Permit Condition EG1 through EG6 Emergency Diesel Generators  
EG7 and EG8 Fire Pump Diesel Engines

GM requests that the following corrections be made to the equipment descriptions:

<b>EG1 through EG6 – Emergency Diesel Generators EG7 and EG8 – Fire Pump Diesel Engines</b>	
<b>Emission Unit</b>	<b>Description</b>
EG1	Computer Room Emergency Generator - 470 Horsepower (HP) Cummins Generator. Model: QSL9-G7- NR3, Serial #I120385603. Type: 4 cycle, in-line, 6 cylinder with a total displacement of 8.9 liters. EPA Model Year: 2012, Purchase /Installation Date: 2012
EG2	Body Shop Emergency Generator – 617 HP John Deer Diesel Generator. Model: 6135HF485, Serial # RG6135L027453 Type - 4 cycle, in-line, 6 cylinder with a total displacement of 13.5 liters. EPA Model Year: 2012, Purchase /Installation Date: 2013
EG3	Paint Emergency Generator – 335 HP Detroit Diesel. Model: 70837305, Serial #8VA416817. EPA Model Year: 1982, Purchase /Installation Date: 1982
EG4	Trim Emergency Generator – 335 HP Detroit Diesel. Model: 70837305, Serial #8VA416817. EPA Model Year: 1982, Purchase /Installation Date: 1982

EG5	Chassis Emergency Generator – 335 HP Detroit Diesel. Model: 70837305, Serial #8VA416814. EPA Model Year: 1982, Purchase /Installation Date: 1982
EG6	Powerhouse Emergency Generator – 1325 HP Detroit Diesel. Model: 91637305, Serial # 91637305 EPA Model Year: 1982, Purchase /Installation Date: 1982
EG7	A47 Fire Pump Engine (Emergency CI RICE) – 188 HP Detroit Diesel. Model: 10447312, Serial #4A0253555. EPA Model Year: 1982, Purchase /Installation Date: 1982
EG8	Powerhouse Fire Pump Engine (Emergency CI RICE) – 288 HP Detroit Diesel. Model: DDFD-06AT, Serial #6A0417778. EPA Model Year: 1982, Purchase /Installation Date: 1982

**Response to Comment:** *The corrections have been made as requested.*

**Comment #7:** Statement of Basis Page SB-3

GM requests that the typo in the third paragraph be corrected:

Following the Guidecoat application, the vehicle bodies proceed into a flash-off tunnel and then enter the Guidecoat oven. The oven has entrance and exit air seals where mechanical air curtains or bottom entry oven configurations assist in retaining the heat in the oven. At the exit end of the oven, after the air seal, the vehicle travels through a cool- down enclosure to quickly reduce the vehicle surface temperature. The oven has several oven zones that are then exhausted through catalytic oxidizers.

**Response to Comment:** *The typographical error has been corrected.*

**Comment #8:** Statement of Basis Page SB-4

GM requests that the extra period be deleted:

The booth walls, applicator and applicator support equipment, grating, etc., are periodically cleaned as well as the ovens with various solvents and or high pressure water. Various water reducible maskings may be applied to the booth walls and grease is applied to the exposed conveyor tracks to minimize cleaning efforts. .

**Response to Comment:** *The extra period has been deleted.*

**Comment #9:** Statement of Basis Page SB-5

GM Requests that the following typos be corrected in 4) EPN-4 Final Repair System paragraph:

4) EPN-4 Final Repair System (Spot repair booths): After general assembly, any paint defects are corrected in the final repair system that consists of a prep operation and spot repair facilities. Final repair operations are located on the final portion of the assembly line. Spot repairs consist of repairs to small areas, usually less than a few square inches. These repairs are made with various techniques such as finessing with polishing compounds; touch-up brushes and / or airbrushes and is performed in a spray area.

**Response to Comment:** *The typographical error has been corrected.*

**Comment #10:** Statement of Basis Page SB-11

GM requests that 3) be corrected to reflect the correct boilers:

3) 40 CFR Part 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971.

The provisions of this subpart apply to each fossil-fuel-fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour) constructed or modified after August 17, 1971 and not covered under Subpart Da.

The powerhouse boilers are rated at less than 250 MMBtu/hr each, therefore, Boilers 2, 3, and 4 are not subject to this subpart.

*Response to Comment: The corrections have been made as requested.*

**Comment #11:** Statement of Basis Page SB-14

GM requests that typo in 9) b corrected:

9) 40 CFR Part 63 Subpart JJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

This regulation does not apply to the boilers and process heaters at this facility because it is a major source of hazardous air pollutants (HAPS).

*Response to Comment: The typographical error has been corrected.*

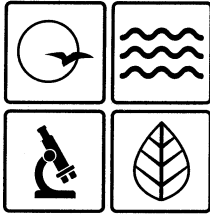
**The following two comments (Comment #12 and #13) were received on July 25, 2017 from EPA Region 7:**

**Comment #12:** Permit Condition (EG1, EG2, EG4 and EG5)-001 incorporates the applicable requirements from 40 CFR Part 60, Subpart IIII-*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* as related to Emission Units EG1, EG2, EG4 and EG5. Emission Standard 2), in this draft operating permit, includes standards which are applicable to the manufacturers of stationary compression ignition internal combustion engines and EPA believes these standards are not applicable to GM-Wentzville and therefore should not be included in this Part 70 operating permit.

*Response to Comment: The APCP agrees with your comment and the standards of 40 CFR Part 60, Subpart IIII which are applicable to the manufacturers of stationary CI ICE have been removed from Permit Condition (EG1, EG2, EG4 and EG5)-00.*

**Comment #13:** Also, Permit Condition (EPN-8)-001 incorporates special conditions from Permit to Construct #032013-010, as related to Emission Unit EPN-8 (Boiler #2, Boiler #3 and Boiler #4). Permit Condition (EPN-8)-001 limits the permittee to less than 180,762 tons of CO<sub>2</sub>e in any consecutive 12-month period. Permit to Construct #032013-010 says that "because the potential emissions of the application for CO<sub>2</sub>e are greater than the PSD significance level, the facility opted to take an emissions increase limit of 75,000.0 tons per year of CO<sub>2</sub>e to avoid PSD review. The final CO<sub>2</sub>e limit of 180,762.0 tons per year is the BAE (105,762 tons per year) plus 75,000.0 tons per year of increase. The CO<sub>2</sub>e limit indirectly limits the natural gas usage to under 3,577 MM SCF/YR of natural gas, which is the amount used to calculate the projected actual emissions." On June 23, 2014, the United States Supreme Court held that EPA may not treat greenhouse gases as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD permit, therefore, Permit Condition (EPN-8)-001 may no longer be required; except it remains as an applicable condition in Permit to Construct #032013-010. GM-Wentzville and MDNR might want to consider modification to Permit to Construct #032013-010 to eliminate this CO<sub>2</sub>e limitation and subsequently remove Permit Condition (EPN-8)-001 from the Part 70 operating permit.

*Response to Comment: The APCP will consider your suggestions and will work with GM to amend CO<sub>2</sub>e limitation in the Construction Permit #032013-010.*



Missouri Department of dnr.mo.gov  
**NATURAL RESOURCES**  
Eric R. Greitens, Governor Carol S. Comer, Director

**DEC 04 2017**

Ms. Nancy Laubenthal  
General Motors LLC Wentzville Assembly Plant  
1500 East Route A  
Wentzville, MO 63385

Re: General Motors LLC Wentzville Assembly Plant, 183-0076  
Permit Number: OP2017-089

Dear Ms. Laubenthal: \_\_\_\_\_

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permit Unit Chief

MJS:bgj

Enclosures

c: PAMS File: 2015-04-096

