

DRAFT CAAPP PERMIT
October 13, 2006

217/782-2113

RENEWAL
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Electro-Motive Diesel, Inc.
Attn: Jack Kaps, Assistant Superintendent Env. Eng.
9301 West 55th Street
McCook, Illinois 60525

I.D. No.: 031174AAA
Application No.: 95120282

Date Received: June 1, 2004
Date Issued:
Expiration Date¹:

Operation of: Locomotive engines and components manufacturing
Source Location: 9301 West 55th Street, McCook, Cook County
Responsible Official: Al Hediger, Vice President Operations

This permit is hereby granted to the above-designated Permittee to OPERATE a Locomotive engines and components manufacturing plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Sunil Suthar at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SIS:psj

cc: Illinois EPA, FOS, Region 1
CES
Lotus Notes

¹ Except as provided in Conditions 1.5 and 8.7 of this permit.

TABLE OF CONTENTS

| | <u>Page</u> |
|--|-------------|
| 1.0 INTRODUCTION | 4 |
| 1.1 Source Identification | |
| 1.2 Owner/Parent Company | |
| 1.3 Operator | |
| 1.4 Source Description | |
| 1.5 Title I Conditions | |
| 2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED | 6 |
| 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES | 7 |
| 3.1 Identification of Insignificant Activities | |
| 3.2 Compliance with Applicable Requirements | |
| 3.3 Addition of Insignificant Activities | |
| 4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE | 10 |
| 5.0 OVERALL SOURCE CONDITIONS | 11 |
| 5.1 Applicability of Clean Air Act Permit Program (CAAPP) | |
| 5.2 Area Designation | |
| 5.3 Source-Wide Applicable Provisions and Regulations | |
| 5.4 Source-Wide Non-Applicability of Regulations of Concern | |
| 5.5 Source-Wide Control Requirements and Work Practices | |
| 5.6 Source-Wide Production and Emission Limitations | |
| 5.7 Source-Wide Testing Requirements | |
| 5.8 Source-Wide Monitoring Requirements | |
| 5.9 Source-Wide Recordkeeping Requirements | |
| 5.10 Source-Wide Reporting Requirements | |
| 5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios | |
| 5.12 Source-Wide Compliance Procedures | |
| 6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS | 19 |
| 6.1 Emissions Reduction Market System (ERMS) | |
| 6.2 NO _x Trading Program | |
| 6.3 Acid Rain | |
| 7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS | 25 |
| 7.1 Unit 01 Process emission units | |
| 7.2 Unit 02 Coating operation | |
| 7.3 Unit 03 Test cells | |
| 7.4 Unit 04 Storage Tank | |

| | <u>Page</u> |
|--|-------------|
| 7.5 Unit 05 Carrie Line Solvent Washer | |
| 7.6 Unit 06 Fugitive Emissions | |
| 8.0 GENERAL PERMIT CONDITIONS | 51 |
| 8.1 Permit Shield | |
| 8.2 Applicability of Title IV Requirements | |
| 8.3 Emissions Trading Programs | |
| 8.4 Operational Flexibility/Anticipated Operating Scenarios | |
| 8.5 Testing Procedures | |
| 8.6 Reporting Requirements | |
| 8.7 Title I Conditions | |
| 9.0 STANDARD PERMIT CONDITIONS | 56 |
| 9.1 Effect of Permit | |
| 9.2 General Obligations of Permittee | |
| 9.3 Obligation to Allow Illinois EPA Surveillance | |
| 9.4 Obligation to Comply with Other Requirements | |
| 9.5 Liability | |
| 9.6 Recordkeeping | |
| 9.7 Annual Emissions Report | |
| 9.8 Requirements for Compliance Certification | |
| 9.9 Certification | |
| 9.10 Defense to Enforcement Actions | |
| 9.11 Permanent Shutdown | |
| 9.12 Reopening and Reissuing Permit for Cause | |
| 9.13 Severability Clause | |
| 9.14 Permit Expiration and Renewal | |
| 9.15 General Authority for the Terms and Conditions of this Permit | |
| 10.0 ATTACHMENTS | |
| 1 Example Certification by a Responsible Official | 1-1 |
| 2 Emissions of Particulate Matter from Process Emission Units | 2-1 |
| 3 Compliance Assurance Monitoring (CAM) Plan | 3-1 |
| 4 Guidance | 4-1 |

1.0 INTRODUCTION

1.1 Source Identification

Electro-Motive Diesel, Inc. (EMD)
9301 West 55th Street
McCook, Illinois 60525
708/387-5904

I.D. No.: 031174AAA
County: Cook County
Standard Industrial Classification: 3743, Railroad Equipment

1.2 Owner/Parent Company

Electro-Motive Diesel, Inc.
9301 West 55th Street
McCook, Illinois 60525

1.3 Operator

Electro-Motive Diesel, Inc.
9301 West 55th Street
McCook, Illinois 60525

Jack Kaps
708/387-5904

1.4 Source Description

The Electro-Motive Diesel, Inc., is located at 9301 West 55th Street in McCook, which is located in Cook County. Electro-Motive Diesel, Inc. manufactures various locomotive components and diesel engines at this facility. Raw materials are received in the form of steel plates, rods, castings, et cetera. Processes such as cutting, grinding, milling, drilling, heat-treating, and welding are used to transform these materials into finished parts. The finished parts obtained from the various departments and off-site are assembled into complete components and engines. Engines and some components are tested and painted.

Note: This narrative description is for informational purposes only and is not enforceable.

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include PSD and MSSCAM, and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois

Environmental Protection Act (Act). These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

- a. This permit contains Title I conditions that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1."
- b. This permit contains Title I conditions that revise Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1R."
- c. This permit contains Title I conditions that are newly established in this CAAPP permit, which conditions are specifically designated as "T1N."

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

| | |
|-------------------|--|
| ACMA | Alternative Compliance Market Account |
| Act | Illinois Environmental Protection Act [415 ILCS 5/1 et seq.] |
| AP-42 | Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711 |
| ATU | Allotment Trading Unit |
| BACT | Best Available Control Technology |
| BAT | Best Available Technology |
| CAA | Clean Air Act [42 U.S.C. Section 7401 et seq.] |
| CAAPP | Clean Air Act Permit Program |
| CAM | Compliance Assurance Monitoring |
| CEMS | Continuous Emission Monitoring System |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| ERMS | Emissions Reduction Market System |
| HAP | Hazardous Air Pollutant |
| IAC | Illinois Administrative Code |
| I.D. No. | Identification Number of Source, assigned by Illinois EPA |
| ILCS | Illinois Compiled Statutes |
| Illinois EPA | Illinois Environmental Protection Agency |
| LAER | Lowest Achievable Emission Rate |
| MACT | Maximum Achievable Control Technology |
| MSSCAM | Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas) |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| NO _x | Nitrogen Oxides |
| NSPS | New Source Performance Standards |
| PM | Particulate Matter |
| PM ₁₀ | Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods |
| PM _{2.5} | Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods |
| PSD | Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas) |
| RMP | Risk Management Plan |
| SO ₂ | Sulfur Dioxide |
| T1 | Title I - identifies Title I conditions that have been carried over from an existing permit |
| T1N | Title I New - identifies Title I conditions that are being established in this permit |
| T1R | Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit |
| USEPA | United States Environmental Protection Agency |
| VOM | Volatile Organic Material |

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

- 2 750,000 Gallons Industrial Wastewater Tanks
- 1 Welding and Brazing Operations
- 1 Parts Machining
- 1 Touch-Up Paint Electrical Lockers
- 1 Machine and Assembly Turbo Line
- 1 Machine and Assembly Headline
- 1 Machine Piston Pin Line
- 1 Assembly and Machine Expansion Joint Line
- 1 Machine and Assembly Brush Holder Line
- 1 Machine and Assembly Adapter Manufacturing
- 1 1.6 mmBtu/Hr Natural Gas-Fired Oven
- 1 8.6 mmBtu/Hr Natural Gas-Fired Furnace
- 1 Salt Bath and Hot Water Tank – Natural Gas-Fired

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

- 34 Alkaline Washers
- 4 Magnaflux Tanks
- 7 Cooling Water Towers
- 2 - 0.8 mmBtu/Hr Natural Gas-Fired Ovens

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b). Note: These activities are not required to be individually listed.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 218.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.

3.2.4 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70 °F, the Permittee shall comply with the applicable requirements of 35 IAC 218.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---------------|-----------------------------|------------------|----------------------------|
| 01 | Process Emission Units | After 1972 | None |
| 02 | Coating Operation | After 1972 | None |
| 03 | Test Cells | After 1972 | None |
| 04 | Storage Tanks | After 1972 | None |
| 05 | Carrier Line Solvent Washer | After 1972 | None |
| 06 | Fugitive Emissions | After 1972 | ---- |

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of NO_x, and VOM emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit because the source is in a source category designated by the USEPA, pursuant to 40 CFR 70.3(a)(5) [Section 39.5(2)(a)(iv) of the Act].
- 5.1.3 For purposes of the CAAPP and Title I of the Clean Air Act, Electro-Motive Diesel, Inc. is considered a single source with NICOR Home Services, LLC, I.D. No. 031174ACH, located at 9301 West 55th Street, McCook. A separate CAAPP permit is applicable for NICOR Solutions operation.

5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated nonattainment for the National Ambient Air Quality Standards for ozone (moderate nonattainment) and PM_{2.5} and attainment or unclassifiable for all other criteria pollutants CO, NO₂, SO₂, Lead, PM₁₀.

5.3 Source-Wide Applicable Provisions and Regulations

- 5.3.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions for Specific Emission Units) of this permit.
- 5.3.2 In addition, emission units at this source are subject to the following regulations of general applicability:
 - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
 - b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.
- 5.3.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40

CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.3.4 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit the items below. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.3.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144 and is incorporated by reference into this permit.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.
- c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.
- d. Any subsequent revisions of the plan shall also be sent to the Cook County Department of Environmental Control.

5.3.7 PM₁₀ Contingency Measure Plan

This stationary source meets the criteria in 35 IAC 212.700 and is required to prepare and submit a contingency measure plan reflecting the PM₁₀ emission reductions as set forth in 35 IAC 212.701 and 212.703. The plan submitted to the Illinois EPA is incorporated by reference into this permit and shall be implemented by the Permittee in accordance with 35 IAC 212.704 following notification by the Illinois EPA. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U.

5.4 Source-Wide Non-Applicability of Regulations of Concern

This source is not subject to 40 CFR 63, Subpart M - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products since it has established synthetic minor limits for HAPs below major source thresholds.

This source is not subject to 40 CFR 63, Subpart P - National Emission Standards for Hazardous Air Pollutants: Engine Test Cells/Stands since it has established synthetic minor limits for HAPs below major source thresholds.

5.5 Source-Wide Control Requirements and Work Practices

Source-wide control requirements and work practices are not set for this source. However, there are requirements for unit specific control requirements and work practices set forth in Section 7 of this permit.

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable (see Section 39.5(18) of the Act).

Permitted Emissions of Regulated Pollutants

| Pollutant | Tons/Year |
|------------------------------------|-----------|
| Volatile Organic Material (VOM) | 109.4 |
| Sulfur Dioxide (SO ₂) | 147.0 |
| Particulate Matter (PM) | 74.7 |
| Nitrogen Oxides (NO _x) | 2,932.7 |
| HAP, not included in VOM or PM | ----- |
| Total | 3,263.8 |

5.6.2 Emissions of Hazardous Air Pollutants

Pursuant to Section 39.5(7)(a) of the Act, the emissions of HAPs from the source shall be less than 9.9 tons/year for each individual HAP and 20 tons/year for all HAPs combined. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). This condition is being imposed so that the source is not a major source of HAP emissions. The Permittee shall fulfill the applicable testing, recordkeeping, and reporting requirements of Conditions 5.7.2, 5.9.2, and 5.10.2.

5.6.3 Other Source-Wide Production and Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to the federal rules for PSD, state rules for MSSCAM, or Section 502(b)(10) of the CAA. However, there are unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.7 Source-Wide Testing Requirements

5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].
- b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].
- c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.7.2 HAP Testing to Verify Minor Source Status

Pursuant to Condition 5.7.1 and to verify compliance with the requirements of Condition 5.6.2, that is that this source is not a major source of HAPs, the following testing requirements are established:

- a. If in the previous calendar year, emissions of combined HAPs exceeded 20 tons, then testing of all coatings for HAPs using USEPA Method 24 or 24A shall be conducted as follows:

Test all coating material(s) that contribute to individual and total HAP emissions.

- b. Testing may be conducted by the supplier of the HAP-containing material.

- c. The calculation as to whether the 20 tons of combined HAPs was exceeded shall be based on records and procedures in Condition 5.9.2 and shall be completed by February 28 for the previous calendar year. If testing is required it shall be completed by April 15.
- d. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.8 Source-Wide Monitoring Requirements

The source shall develop and follow an appropriate QA/QC program designed by the Permittee to identify compliance with all conditions of this permit.

5.9 Source-Wide Recordkeeping Requirements

5.9.1 Annual Emission Records

The Permittee shall maintain records of total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7) (b) of the Act.

5.9.2 Records for HAP Emissions

- a. The Permittee shall maintain records of individual and combined HAP emissions on a monthly and annual basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.2, pursuant to Section 39.5(7) (b) of the Act.
- b. If testing is required by Condition 5.7.2, the Permittee shall keep records of the testing, including the test date, conditions, methodologies, calculations, test results, and any discrepancies between the test results and formulation specifications of Condition 5.9.2(c) below.
- c. The Permittee shall keep documentation showing the formulation of each coating, including content of all HAPs. This documentation may be used to make the calculation of HAP emissions required by Condition 5.7.2.
- d. The Permittee shall keep a record of the applicability determination for 40 CFR 63, Subpart Mmmm and 40 CFR 63, Subpart Ppppp at the source for a period of five years after the determination. This determination shall include a detailed analysis that demonstrates why the Permittee believes the source is not subject to 40 CFR 63, Subpart Mmmm and 40 CFR 63, Subpart Ppppp [40 CFR 63.10(b) (3)].

5.9.3 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.9.4 Records for Other Source-Wide Emission Limitations

- a. The annual individual HAP limitation of 9.9 tons per year of Condition 5.5.2 will be based on the facility wide highest individual coating HAP emissions as these HAPs have been identified as the single largest source of HAPs at the facility. Compliance with the annual 9.9 tons per year emission limit shall be based on the record keeping requirements in Section 7.2.9 applicable to the Alternator Assembly Line (alternator varnish dip), Engine Paint Booths and the Alternator/Turbo Paint booth and the formulas listed below:

$$\text{Highest Individual HAP (tons)} = [\text{Coating Usage (gal)} \times \text{Coating Density (lb/gal)} \times \text{Individual HAP Content of Coating (\% by wt.)}] / 2000$$

Actual individual coating HAP emission will be calculated monthly on a rolling 12 month average basis.

- b. If additional HAP is identified as being larger than the highest individual coating HAP in usage, the facility must submit a significant modification within 30 days of discovery of the additional HAP to revise this condition and other related conditions.
- c. Report any deviation of this limit in accordance with 5.10.1(i).

5.10 Source-Wide Reporting Requirements

5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such

deviations, and any corrective actions or preventive measures taken. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

Deviation from 5.9.4(i) shall be reported within 5 days of discovery.

Any deviation from any of the conditions in this permit shall be reported in the semi-annual report including those with specific reporting time frames.

5.10.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information, including HAP emissions, for the previous calendar year.

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Source-wide operational flexibility is not set for this source. However, there are provisions for unit specific operational flexibility set forth in Section 7 of this permit.

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be addressed by the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

6.1 Emissions Reduction Market System (ERMS)

6.1.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

6.1.2 Applicability

This source is considered a "participating source" for purposes of the ERMS, 35 IAC Part 205.

6.1.3 Obligation to Hold Allotment Trading Units (ATUs)

- a. Pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, and as further addressed by Condition 6.1.8, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 6.1.5.
 - i. VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit, in accordance with 35 IAC 205.220;
 - ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit as authorized in Section 7.0 of this permit, in accordance with 35 IAC 205.225;
 - iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3);
 - iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 IAC 205.750; and
 - v. VOM emissions from certain new and modified emission units as addressed by Condition 6.1.8(b), if applicable, in accordance with 35 IAC 205.320(f).
- b. Notwithstanding the above condition, in accordance with 35 IAC 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 IAC Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions in Section 7.0 of this permit.

6.1.4 Market Transactions

- a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any market transactions, as specified at 35 IAC 205.610(a).
- b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 IAC 205.610(b).

- c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 IAC 205.620(a).
- d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 IAC 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

6.1.5 Emissions Excursion Compensation

Pursuant to 35 IAC 205.720, if the source fails to hold ATUs in accordance with Condition 6.1.3, it shall provide emissions excursion compensation in accordance with the following:

- a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:
 - i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or
 - ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.
- b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.
- c. Pursuant to 35 IAC 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source's next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

6.1.6 Quantification of Seasonal VOM Emissions

- a. The methods and procedures specified in Sections 5 and 7 of this permit for determining VOM emissions and compliance with VOM emission limitations shall be used for determining seasonal VOM emissions for purposes of the ERMS, with the following exceptions [35 IAC 205.315(b)]:

No exceptions

- b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 IAC 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 IAC 205.750(a), and shall be submitted in accordance with the following:
 - i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and
 - ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.

6.1.7 Annual Account Reporting

- a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 IAC 205.300]:
 - i. Actual seasonal emissions of VOM from the source;
 - ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;
 - iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 IAC 205.337;
 - iv. If a source has experienced an emergency, as provided in 35 IAC 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;
 - v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 IAC 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3); and
 - vi. If a source is operating a new or modified emission unit for which three years of operational data is not

yet available, as specified in 35 IAC 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.

- b. This report shall be submitted by November 30 of each year, for the preceding seasonal allotment period.

6.1.8 Allotment of ATUs to the Source

- a.
 - i. The allotment of ATUs to this source is 167 ATUs per seasonal allotment period.
 - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 18.01 tons per season.
 - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.1.10 of this permit.
 - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.

- b. Contingent Allotments for New or Modified Emission Units

Not applicable

- c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 IAC Part 205, including:
 - i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;
 - ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 IAC 205.720; and
 - iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

6.1.9 Recordkeeping for ERMS

The Permittee shall maintain copies of the following documents as its Compliance Master File for purposes of the ERMS [35 IAC 205.700(a)]:

- a. Seasonal component of the Annual Emissions Report;
- b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.1.6(a); and
- c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

6.1.10 Exclusions from Further Reductions

- a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 205.405(a)]:
 - i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;
 - ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and
 - iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 IAC 205.405(a) and (c)]:

| Emission Unit | Emission Unit Description |
|---------------|---------------------------|
| 03 | R and D Test Cells |
| | Durability Test Cells |
| | Production Test Cells |

- b. VOM emissions from emission units using BAT for controlling VOM emissions shall not be subject to the VOM emissions reductions requirement specified in 35 IAC 205.400(c) or (e) as long as such emission unit continues to use such BAT [35 IAC 205.405(b)].

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because these emission units use BAT for controlling VOM emissions as indicated above [35 IAC 205.405(b) and (c)]:

None

6.2 NO_x Trading Program

Not applicable to this facility

6.3 Acid Rain

Not applicable to this facility

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Unit 01 - Process Emission Units

7.1.1 Description

The facility manufactures various locomotive components and diesel engines. Raw materials are received in the form of steel plates, rods, castings, et cetera. Processes such as cutting, grinding, milling, drilling, heat treating, and welding are used to transform these materials into finished parts. The finished parts obtained from the various departments and off-site are assembled into complete components and engines.

7.1.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---------------|------------------------------------|------------------|----------------------------|
| 01 | Alternator Assembly Line | After 1972 | None |
| | Crankcase and Oil Pan Construction | After 1972 | None |
| | Liner Line | After 1972 | None |
| | Piston Line | After 1972 | None |
| | Carrier Line | After 1972 | None |
| | Connecting Rod Line | After 1972 | None |

7.1.3 Applicable Provisions and Regulations

- a. An "affected process emission unit" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.1.1 and 7.1.2.
- b. Each affected process emission unit is subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

- c. No person shall cause or allow the emission into the atmosphere, of PM₁₀, from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) specified in subsection (b) of 35 IAC 212.324.

No person shall cause or allow the emission into the atmosphere, of PM, from any particulate collection

equipment to exceed 68.7 mg/scm (0.03 gr/scf) specified in 35 IAC 212.313.

- d. Each affected process emission unit is subject to the opacity limits identified in Condition 5.3.2(b).

7.1.4 Non-Applicability of Regulations of Concern

The affected coating operation is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected coating operation does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.1.5 Control Requirements and Work Practices

None

7.1.6 Production and Emission Limitations

In addition to Condition 5.3, and the source-wide emission limitations in Condition 5.6.1 and 7.1.3, the affected process emission unit is subject to the following:

None

Emission limits for PM/PM₁₀, are not set for the affected process emission units, as potential to emit in the absence of permit limit is less than the significant and major source thresholds for these pollutants pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification.

7.1.7 Testing Requirements

Testing requirements are not set for the affected process emission unit. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.1.8 Monitoring Requirements

Monthly inspections to ensure liquid lubricant or coolant flushing in the machining processes are functional.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected process emission unit to demonstrate compliance with Conditions 5.6.1 and 7.1.3, pursuant to Section 39.5(7)(b) of the Act:

- a. Hours of operation (hours/yr); and

b. Process weight rate.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected process emission unit with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of PM, or PM₁₀ from an affected process emission unit that constitute a deviation from the limits specified in Condition 7.1.3, within 30 days of knowledge of such an occurrence

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected Process emission units. However, there are provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.1.12 Compliance Procedures

Compliance provisions for condition 7.1.3(b) and (c) are addressed by the recordkeeping and reporting requirements in Condition 7.1.9 and 7.1.10.

7.2 Unit 02 - Coating Operation

7.2.1 Description

After assembly, parts are coated and baked in oven or air-dried.

7.2.2 List of Emission Equipment and Pollution Control Equipment

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---------------|--|------------------|----------------------------|
| 02 | Alternator Stator Priming | Before 1972 | None |
| | Stator Varnish Dipping | After 1972 | None |
| | Engine Paint Booth | After 1972 | None |
| | Liner Painting | After 1972 | None |
| | Alternator, Turbo and Miscellaneous Parts Painting | After 1972 | None |

7.2.3 Applicable Provisions and Regulations

- a. An "affected coating operation" for the purpose of these unit-specific conditions is a coating operation including baking in a natural gas fired oven or air-dried described in conditions 7.2.1 and 7.2.2.
- b. No owner or operator of an existing diesel-electric locomotive coating line in Cook County, subject to the limitations of Section 218.204(m) of this Subpart shall apply coatings to diesel-electric locomotives on the subject coating line unless the requirements of subsection (f) (1) or (f) (2) of Section 218.205 are met.
 - i. For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within Section 218.204(m) of this Subpart, during the same day (e.g., all coatings used on the line are subject to 0.42 kg/l (3.5 lbs/gal)), the daily-weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used.
- c. No owner or operator of an existing diesel-electric locomotive coating line in Cook County, subject to the limitations of Section 218.204(m) shall apply at any time any coating in which the VOM content exceeds the following emission limitations. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

| | kg/liter | lb/gal |
|-----------------------------------|----------|--------|
| Extreme Performance Prime Coat | 0.42 | 3.5 |
| Extreme Performance Top Coat | 0.42 | 3.5 |
| Final Repair Coat | 0.42 | 3.5 |
| High-Temperature Aluminum Coating | 0.72 | 6.0 |
| All Other Coatings | 0.36 | 3.0 |

Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composites.

- d. The affected Alternator Stator priming and varnish dipping operation is subject to 40 CFR 52.741(x)(6)(i)(B), which limit 6.8 lbs VOM per gallon of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator for any coatings not specified in paragraph (x)(6)(i)(A) of the above section.
- e. The affected coating operation is subject to 35 IAC 212.321(a), which requires that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected coating operation is not subject to 35 IAC 218.301, Use of Organic Material, pursuant to 35 IAC 218.209, Exemption From General Rule on Use of Organic Material which excludes the affected coating operation from this requirement.
- b. The affected coating operation is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected coating operation does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Control Requirements and Work Practices

- a. The affected coating operation with baking oven shall only be operated with natural gas as the fuel.
- b. Deleted since this would penalize EMD for pollution prevention projects to eliminate use of Xylene at the facility. Also, note requested changes at 5.9.4. proposed by EMD to simplify the 9.9 tons per year requirement and provide flexibility.

7.2.6 Production and Emission Limitations

In addition to Condition 5.2.2, the source-wide limitations in Condition 5.5, and the VOM content limitations of Condition 7.2.3(c), the coating operation is subject to the following:

a. Emissions and operation of equipment shall not exceed the following limits [T1]:

i. Stator varnish dipping, Permit #95060230

| <u>(Lb VOM/gal)</u> | <u>Coating Usage (gal/mo)</u> | <u>Usage (gal/yr)</u> | <u>VOM Emissions (T/mo)</u> | <u>(T/yr)</u> |
|---------------------|-------------------------------|-----------------------|-----------------------------|---------------|
| 5.5 | 682 | 5455 | 1.9 | 15 |

ii. Engine paint spray booth, Permit #95120294

| | <u>(Lb VOM/gal)</u> | <u>Coating Usage (gal/mo)</u> | <u>Usage (gal/yr)</u> | <u>VOM Emissions (T/mo)</u> | <u>(T/yr)</u> |
|---|---------------------|-------------------------------|-----------------------|-----------------------------|---------------|
| High-Temperature Aluminum Coating | 6.0 | 7 | 50 | | 0.15 |
| Extreme Performance Top Coat & Prime Coat | 3.5 | 338 | 2,705 | 0.6 | 4.73 |
| Cleanup Solvent | 7.2 | 74 | 588 | 0.3 | 2.12 |

iii. Turbo/Alternator paint booth, Permit #96060014

| | <u>(Lb VOM/gal)</u> | <u>Coating usage (gal/mo)</u> | <u>Usage (gal/yr)</u> | <u>VOM emissions (T/mo)</u> | <u>(T/yr)</u> |
|---|---------------------|-------------------------------|-----------------------|-----------------------------|---------------|
| High-Temperature Aluminum Coating | 6.0 | 4 | 30 | 0.02 | 0.1 |
| Extreme Performance Top Coat & Prime Coat | 3.5 | 100 | 800 | 0.2 | 1.4 |
| Cleanup Solvent | 6.74 | 71 | 567 | 0.3 | 1.91 |

iv. Ransohoff spray booth, Permit #92080058

| <u>(Lb VOM/gal)</u> | <u>Coating Usage (Gal/mo)</u> | <u>Usage (Gal/yr)</u> | <u>VOM Emissions (T/mo)</u> | <u>(T/yr)</u> |
|---------------------|-------------------------------|-----------------------|-----------------------------|---------------|
| 0.29 | 450 | 3600 | 0.3 | 2.0 |

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the

current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations are being established in this permit pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification. The source has requested that the Illinois EPA establish emissions limitations and other appropriate terms and conditions in this permit that limit the VOM emissions from the affected coating operation below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1].

7.2.7 Testing Requirements

Upon reasonable request by the Illinois EPA, the VOM and HAP content of specific coatings and cleaning solvents used on the affected coating shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a), 218.208 and 218.211(a).

- a. The VOM and HAP content of representative coatings "as applied" on the affected coating operation shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 218.105(a);
- b. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records pursuant to Condition 7.2.9(b) directly reflect the application of such material and separately account for any additions of solvent. [35 IAC 218.105(a), 218.208, and 218.211(a)]

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected coating operation to demonstrate compliance with this section, pursuant to Section 39.5(7)(b) of the Act:

- a.
 - i. The name and identification number of each coating as applied on the affected coating;
 - ii. Cleanup solvent usage (gal/mo);
 - iii. HAP usage for alternator line (gal/mo);

- iv. The usage of each coating (gal/mo and gal/yr)*;
- v. Density of each coating (lb/gal);
- vi. VOM and HAP content of each coating (wt %) from testing or from supplier MSDS;
- vii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each month on the affected coating operation; and
- viii. Number of parts coated in Ransohoff paint booth (parts/mo; parts/yr).

* The usage of coating (gal/mo and gal/yr) for the Ransohoff paint booth shall be determined by the number of parts coated multiplied by the volume of paint per piece (7 oz/piece).

- b. Records of the testing of VOM and HAP content (in wt. %) of each coating and cleaning solvent as tested pursuant to the conditions of this section, which include the following [Section 39.5(7) (e) of the Act]:
 - i. Identification of material tested;
 - ii. Results of analysis;
 - iii. Density of each coating (lb/gal);
 - iv. VOM and HAP content of each coating (wt. %);
 - v. Documentation of analysis methodology; and
 - vi. Person performing analysis.
- c. VOM and HAP emissions (tons/mo and tons/yr) as calculated by Condition 7.2.12;
- d. Use of natural gas (mmcf/yr); and
- e. Fuel combustion emissions (ton/yr) for baking oven as calculated by Condition 7.2.12.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations by the affected coating operation from the permit requirements as follows, pursuant to Section 39.5(7) (f) (ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Pursuant to 35 IAC 218.211(c) (3) (A), the Permittee shall notify the Illinois EPA of any record showing deviation from Condition 7.2.3(b) (see also 35 IAC 218.204(j)) within 30 days of knowledge of such an occurrence.
- b. Emissions of VOM from an affected coating operation that constitute a deviation from the limits specified in Condition 7.2.3 within 30 days of knowledge of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

- a. Compliance with the particulate matter limitations in condition 7.2.3(e) is assured and achieved by the proper operation and maintenance of the natural gas fired oven.
- b. Compliance of each coating with the VOM emission limitations in Condition 7.2.3 shall be based on the recordkeeping requirements in Condition 7.2.9 and by the use of either testing as required in Condition 7.2.7 or by use of the formulae listed below:

$$\text{VOM Coating Content} = V \times D / [1 - W \times D]$$

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

$$W = \Sigma (w_i / d_i)$$

Where:

w_i = Percent exempt compound i in the coating,

d_i = Overall density of exempt compound i, in lb/gal and the summation Σ is applied over water and all exempt compounds i, in the coating.

- c. Compliance with the VOM emission limits in Condition 5.5 and 7.2.6 from the affected coating operation shall be based on the record keeping requirements in condition 7.2.9 and the formulas listed below:

$$\text{VOM (tons)} = \text{Coating Usage (gal)} \times \text{Coating Density (lb/gal)} \times \text{VOM Content of Coating (\% by wt.)} / 2000$$

- d. Compliance with the emission limits for the oven fired with natural gas in condition 5.5 shall be based on the

recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

| <u>Pollutant</u> | <u>Emission Factor</u> <u>(lb/10⁶ ft³)</u> |
|------------------|---|
| NO _x | 100 |
| PM | 7.6 |
| VOM | 5.5 |

The emission factors for natural gas fired units are from Tables 1.4-1 and 1.4-2, AP-42 Fifth Edition, Volume 1, Supplement D, March 1998.

Emissions (tons) = natural gas consumed multiplied by the appropriate emission factor/2000

7.3 Unit 03 - Test Cells

7.3.1 Description

Electro-Motive Diesel operates engine and turbo production test cells, Research and Development (R & D) test cells, and test cells for durability testing of diesel engines manufactured at the plant. The engines are fired with diesel fuel.

7.3.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---------------|--|---|----------------------------|
| 03 | Engine & Turbo Production Test Cells | Before 1970 | None |
| | R & D Test Cells | Before 1970 | None |
| | Engine Durability Test Cells MU1 Through MU5 | MU1 Modified 1999 MU2 Before 1972 MU3 Before 1972 MU4 in 1982 MU5 in 1989 | None |

7.3.3 Applicable Provisions and Regulations

- a. The "affected engine test cells" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.3.1 and 7.3.2.
- b. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm [35 IAC 214.301].
- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, or 218.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall only apply to photochemically reactive material [35 IAC 218.301].
- d. The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further than such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hours [35 IAC 212.123].

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected engine test cells are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected not use an add-on control device to achieve compliance with an emission limitation or standard.
- b. The affected engine test cells are not subject to 35 IAC 217.141, emissions of nitrogen oxides from existing fuel combustion emission sources in major metropolitan areas, because the actual heat input of each unit is less than 73.2 MW (250 mmBtu/hr) and the affected engine test cells are not by definition fuel combustion emission units.
- c. This permit is issued based on the affected engine test cells not being subject to 35 IAC 212.322 because due to the unique nature of this process, such rules cannot reasonably be applied.

7.3.5 Control Requirements and Work Practices

The affected engine test cells shall only be operated with distillate fuel oil as the fuel.

7.3.6 Production and Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, test cells MU-1, MU-4, and MU-5 are subject to the following:

- a. The NO_x emissions from the engine durability test cells (MU-1, MU-4, and MU-5) shall be controlled through testing of engines that are equipped with turbocharging and aftercooling, or that have technology providing a comparable effect on NO_x emissions, as approved by the Illinois EPA.

Comparable technology has not been approved by IEPA at the time of issuance.

This condition represents the application of BACT as required by Section 165 of the Clean Air Act.

- b. i. A. The ash content of the fuel as used in the engine durability test cells shall not exceed 0.01 percent by weight.
- B. The sulfur content of the fuel as used in the engine durability test cells shall not exceed a maximum of 0.29 percent by weight of any shipment of oil received and an annualized average of 0.24 percent by weight.

- C. The diesel fuel usage (gal/mo and gal/yr) and NO_x emissions (ton/mo and ton/yr) from the engine durability test cells shall not exceed the limits specified in Table I (See Attachment 4).
 - D. The emissions (ton/mo and ton/yr) of volatile organic material (VOM), sulfur dioxide (SO₂), carbon monoxide (CO), particulate matter (PM), and PM₁₀ from the engine durability test cells shall not exceed the limits in Table II (See Attachment 4).
 - E. Compliance with annual limits shall be determined from a running total of 12 months of data.
- c. i. No person shall cause or allow the emission of sound beyond the boundaries of his property, as defined in Section 25 of the Illinois Environmental Protection Act, so as to cause noise pollution in Illinois, or so as to violate any provision of Chapter I: Pollution Control Board, pursuant to 35 IAC Section 900.102. [This provision is state enforceable]
 - ii. The emission of sound from the property-line-noise source shall not exceed the allowable octave and one-third octave band sound pressure levels (dB) under 35 IAC Part 901. [The provision is state enforceable]

7.3.7 Testing Requirements

For Affected Engine Test Cells MU-1, MU-4 and MU-5

For BACT

- a. The Illinois EPA shall be allowed to sample all fuels used for test cells MU-1, MU-4, and MU-5 stored at the above location.
- b. Monthly fuel sampling for ash and sulfur content (can be based on supplier sheets);

For All Affected Engine Test Cells

- c. The Permittee shall conduct a opacity testing by M9 once each month to observe for the presence of abnormal visible emissions.

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected engine test cells to demonstrate compliance with Conditions 5.5.1, 7.3.3 and 7.3.6 pursuant to Section 39.5(7)(b) of the Act:

- a. Fuel usage (gal/yr).
- b. To verify compliance with the opacity limitations of 7.3.3(b), the Permittee shall maintain records of visible emissions observations made during the permit term as required by Condition 7.3.7.
- c. The following items, for test cells MU-1, MU-4, and MU-5:
 - i. The Permittee shall maintain a logbook for the operation of each testing cell that includes, model of engine being tested, start and stop times for operation, and mode of operation, i.e., type of testing being performed.
 - ii. The Permittee shall maintain records of fuel analysis sheets indicating sulfur and ash content for each month to allow the Illinois EPA to review compliance with the requirements of this permit as required by Condition 7.3.7.
- d. Any records or logs required by this Permit shall be retained at a readily accessible location at the plant for at least five years from the date of an entry and shall be made available for inspection and copying by the Illinois EPA.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations by affected engine test cells from the permit requirements as follows, pursuant to Section 39.5(7)(f)(iii) of the Act. Reports shall describe the probable cause of deviations, and any corrective actions or preventive measures taken:

- a. If there is a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

- b. The Permittee shall submit the following additional information for test cells MU-1, MU-4, and MU-5 with the semiannual monitoring report:
 - i. Fuel usage for each testing cell (gal/yr), and
 - ii. A summary of the sulfur and ash content for each month.
 - iii. If there have been no deviations during the prior calendar year, the Annual Emission Report shall include a statement to that effect.
- c. For BACT at Affected Engine Test Cells MU-1, MU-4 and MU-5:
 - i. The Permittee shall notify the Illinois EPA prior to testing any engine design other than the Model 710 or H engine.
 - ii. The Permittee shall obtain prior written approval from the Illinois EPA prior to testing an engine that does not include turbocharging and aftercooling.
- d. If excess visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the excess visible emissions. If the Permittee cannot eliminate the excess visible emissions within 24 hours, the Permittee shall cease operation until corrective action can be taken to eliminate excess visible emissions. Do not have startup and malfunction breakdown authority.
- e. The Permittee shall notify the Illinois EPA prior to revising any emission factor because of revisions or additions to 40 CFR 92 which would result in changes in the corresponding Production Test Cell emission factors for EMD-certified engines.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

- a. To verify compliance with the opacity limitations of 7.3.3(d), as addressed by records, reports and testing.
- b. Compliance with Condition 7.3.3(b) is addressed by records, reports, and testing.

- c. To determine compliance with Conditions 7.3.3(c) and 5.5.1, emissions from the affected engine test cells shall be calculated based on the following emission factors and formulas:

| <u>Test Cells</u> | Emission Factor* (lb/1000 gal) | | | | |
|-------------------|--------------------------------|--------------------------|------------|-----------|------------------------|
| | <u>NO_x</u> | <u>SO₂***</u> | <u>VOM</u> | <u>PM</u> | <u>PM₁₀</u> |
| R & D | 797.0 | 40.0 | 17.00 | 14.00 | 9.52 |
| Production** | | | | | |
| Non cert engine | 797.0 | 40.0 | 17.00 | 14.00 | 9.52 |
| Tier 2 engine | 231.4 | 40.0 | 8.50 | 8.30 | 8.30 |
| MU1, | 713.7 | 34.67 | 12.30 | 11.70 | 8.00 |
| MU4 | 705.20 | 34.67 | 12.30 | 11.70 | 8.00 |
| MU5 | 721.3 | 34.67 | 12.30 | 11.70 | 8.00 |
| MU2, MU3 | 648.50 | 34.45 | 10.02 | 11.78 | 7.91 |

* Emission factors are from the application except the MU1 and MU5 NO_x factors which are based upon previously required stack testing for MU1 and MU5

** Emission factors for EMD certified Tier 2 Locomotive Engine Families are based on applicable 40 CFR 92 Locomotive emission tier 2 standards where feasible. All other non certified engines tested will utilize the emission factors from the above table.

*** SO₂ emissions will be based on monthly diesel fuel sulfur analysis when available. Otherwise the SO₂ emission factors from the above table will be utilized.

Engine Test Cell Emissions (T) = Distillate Fuel Oil Consumed, (gal) x The Appropriate Emission Factor, (lb/1000 gal)/2000

The calculated SO₂ Emission Factor (lb/1000 gal) = Density of the Fuel (lb/gal) x Sulfur Content of Fuel (lbs. Sulfur/lb Fuel) x 1.998 (lb SO₂/lb S₂) x 1000

7.3.13 Compliance Schedules

None

7.4 Unit 04 - Storage Tank

7.4.1 Description

The source operates storage tanks for storing petroleum liquid.

7.4.2 List of Emission Equipment and Pollution Control Equipment

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---------------|---|------------------|----------------------------|
| 04 | TF8: 2,500 Gallons Gasoline Storage Tank | After 1972 | Submerged Loading |
| | TF5: 5,000 Gallons Petroleum Solvent Storage Tank | After 1972 | Submerged Loading |

7.4.3 Applicable Provisions and Regulations

- a. The "affected storage tank", for the purpose of these unit-specific conditions is an emission unit described in conditions 7.4.1 and 7.4.2.
- b. No person shall cause or allow the loading of any organic material in any stationary tank having a storage capacity of greater than 946 liter (250 gallon), unless such tank is equipped with a permanent submerged loading pipe [35 IAC 218.122(b)].
- c. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary tank at gasoline dispensing operation, unless such tank is equipped with a submerged loading pipe [35 IAC 218.583(a)(1)].
- d. The affected tank is subject to 35 IAC 218.585, which provides that:
 - i. No person shall sell, offer for sale, dispense, supply, offer for supply, or transport for use in Illinois gasoline whose Reid vapor pressure exceeds the applicable limitations set forth 35 IAC 218.585(b) and (c) during the regulatory control periods, which shall be May 1 to September 15 for retail outlets, wholesale purchaser-consumer, operations, and all other operations [35 IAC 218.585(a)].
 - ii. The Reid vapor pressure of gasoline, a measure of its volatility, shall not exceed 9.0 psi (62.07 kPa) during the regulatory control period in 1990 and each year thereafter [35 IAC 218.585(b)].
 - iii. The Reid vapor pressure of ethanol blend gasolines shall not exceed the limitations for gasoline set

forth 35 IAC 218.585(b) by more than 1.0 psi (6.9 kPa). Notwithstanding this limitation, blenders of ethanol blend gasolines whose Reid vapor pressure is less than 1.0 psi above the base stock gasoline immediately after blending with ethanol are prohibited from adding butane or any product that will increase the Reid vapor pressure of the blended gasoline [35 IAC 218.585(c)].

7.4.4 Non-Applicability of Regulations of Concern

- a. The affected storage tank is not subject to the requirements of 35 IAC 218.121, because the tank is less than 40,000 gal.
- b. The affected storage tank is not subject to the requirements of 35 IAC 218.122(a), because the tank is less than 40,000 gal.
- c. The affected storage tank is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the tanks utilize a passive control measure, such as a seal, lid, or roof, that is not considered a control device because it acts to prevent the release of pollutants.

7.4.5 Control Requirements and Work Practices

Each affected storage tank is subject to the applicable provisions of Condition 7.4.3. The affected storage tank shall be equipped and operated with a submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA, pursuant to 35 IAC 218.122(b) and/or 218.583(a). (The Illinois EPA has not approved use of other equivalent equipment in lieu of a submerged loading pipe or submerged loading fill.)

7.4.6 Production and Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limits in Condition 5.5, the affected storage tanks are subject to the following:

None

7.4.7 Testing Requirements

Upon reasonable request by the Illinois EPA during the regulatory season, and pursuant to Section 39.5(7)(b) of the Act, the Reid vapor pressure of gasoline and the ethanol content of ethanol blend gasolines shall be determined according to the methods specified below (supplier data may be used):

- a. Pursuant to 35 IAC 218.585(d), all sampling of gasoline required pursuant to the provisions of Conditions

7.7.7(c)(ii) and (c)(iii) (see also 35 IAC 218.585(e) and (f)) shall be conducted by one or more of the following approved methods or procedures:

- i. For manual sampling, ASTM D4057 [35 IAC 218.585(d)(1)];
 - ii. For automatic sampling, ASTM D4177 [35 IAC 218.585(d)(2)]; or
 - iii. Sampling procedures for Fuel Volatility, 40 CFR 80 Appendix D [35 IAC 218.585(d)(3)].
- b. The Reid vapor pressure of gasoline shall be measured in accordance with either test method ASTM D323 or a modification of ASTM D323 known as the "dry method" as set forth in 40 CFR 80, Appendix E. For gasoline - oxygenate blends which contain water-extractable oxygenates, the Reid vapor pressure shall be measured using the dry method test [35 IAC 218.585(e)].
 - c. The ethanol content of ethanol blend gasolines shall be determined by use of one of the approved testing methodologies specified in 40 CFR 80, Appendix F [35 IAC 218.585(f)].

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected tank to demonstrate compliance with Condition 7.4.5 and 7.4.6 pursuant to Section 39.5(7) of the Act:

- a. Design information for the tank showing the presence of a submerged loading pipe or submerged fill;
- b. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- c. The throughput of the affected storage tanks, gal/yr;
- d. The annual VOM emissions from the affected storage tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations; and
- e. Maintain records of the Reid vapor pressure for any requested testing. The Illinois EPA shall be provided with copies of such records if requested.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations by the affected storage tank from the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Any loading of gasoline or other VOL into an affected tanks that experienced a deviation from Condition 7.4.5, e.g., no "submerged loading pipe or submerged fill" within five days of becoming aware of the deviation. This notification shall include a description of the event, the probable cause for the deviation, any actions taken to correct the deviation and any steps taken to avoid future deviations.
- b. Any storage of gasoline or other VOL in an affected tanks that constitutes a deviation from the control requirements (Condition 7.4.5) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the deviation. This notification shall include a description of the event, the probable cause for the deviation, any actions taken to correct the deviation, and any steps to be taken to avoid future deviations.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

Compliance with the emission limits in condition 5.5, 7.4.3, and 7.4.6 shall be based on the recordkeeping, reporting, testing and inspection requirements in Conditions 7.4.7, 7.4.9, and 7.4.10 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected storage tank, the current version 3.1 of the TANKS program is acceptable, or any subsequent program submitted by the Permittee and accepted by Illinois EPA.

7.5 Unit 05 - Carrier line solvent washer

7.5.1 Description

The Carrier line solvent washer is a cold cleaning tank used for cleaning piston carrier for the engine. This washer utilizes mineral spirits as the solvent in this process. The mineral spirits is a high flash, non-photochemically reactive, solvent containing no hazardous air pollutants (HAPs). The washer is enclosed with a conveyor to move parts in and out of the washer. The openings into the washer have a plastic flap, which remains closed except when parts are physically moving into or out of the washer.

7.5.2 List of Emission Units and Pollution Control Equipment

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---------------|---------------------|------------------|----------------------------|
| 05 | Solvent Washer Tank | After 1972 | None |

7.5.3 Applicable Provisions and Regulations

- a. An "affected solvent washer" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.5.1 and 7.5.2.
- b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from an affected process emission unit, except as provided in Sections 218.302, 218.303, 218.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 218.301].
- c. Pursuant to 35 IAC 218.182(b), No person shall operate a cold cleaning degreaser unless:
 - i. The degreaser is equipped with a cover, which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counter-weights or a powered system if:
 - A. The solvent vapor pressure is greater than 2 kPa (15 mmHg or 0.3 psi) measured at 38°C (100°F);
 - B. The solvent is agitated; or
 - C. The solvent is heated above ambient room temperature.

- ii. The degreaser is equipped with a device for draining cleaned parts. The drainage device shall be constructed so that parts are enclosed under the cover while draining unless:
 - A. The solvent vapor pressure is less than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F); or
 - B. An internal drainage device cannot be fitted into the cleaning system, in which case the drainage device may be external.
- iii. The degreaser is equipped with one of the following control devices if the vapor pressure of the solvent is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) or its boiling point:
 - A. A freeboard height of 7/10 of the inside width of the tank or 91 cm (36 in), whichever is less; or
 - B. Any other equipment or system of equivalent emission control as approved by the Illinois EPA and further processed consistent with Section 218.108 of this Part. Such a system may include a water cover, refrigerated chiller or carbon adsorber.

No such alternative has been approved as of the date of issuance of this permit.
- iv. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser.

7.5.4 Non-Applicability of Regulations of Concern

- a. The affected solvent washer is not subject to 35 IAC 218.182(b)(5) applicable to solvent spray because the solvent washer is closed when the parts are inside the washer.
- b. The affected solvent washer is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected solvent washer does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.5.5 Control Requirements and Work Practices

- a. Pursuant to 35 IAC 218.182(a), No person shall operate a cold cleaning degreaser unless:

- i. Waste solvent is stored in covered containers only and not disposed of in such manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere [35 IAC 218.182(a) (1)];
- ii. The cover of the degreaser is closed when parts are not being handled [35 IAC 218.182(a) (2)]; and
- iii. Parts are drained until dripping ceases [35 IAC 218.182(a) (3)].

7.5.6 Production and Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.5.7 Testing Requirements

Testing upon request for vapor pressure of solvent and VOM content.

7.5.8 Monitoring Requirements

Weekly inspections for covers and freeboard height

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected cold cleaning tank to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7) (b) of the Act:

- a. Cleaning solvent usage, lb/mo and lb/yr;
- b. Inspection records; and
- c. Test results and other documentation for vapor pressure and VOM content.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations by the affected cold cleaning tank from the permit requirements as follows, pursuant to Section 39.5(7) (f) (ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.5.12 Compliance Procedures

- a. For determination of compliance with the limits of this permit, solvent usage shall be determined by the following equation:

$$U = V \times E$$

Where:

U = Solvent usage for compliance determinations (gallons)

V = Virgin solvent added to the degreasers (gallons), as determined by daily addition log sheets.

E = Emission factor of 40%--based on conservative engineering estimates and material balance.

- b. Compliance with the organic material emission limits shall be calculated using the solvent density, and the solvent usage (U) per month, as follows:

$$\text{Emission} = \text{Solvent usage (gallon/month)} \times \text{Solvent density (lb/gallon)}$$

7.6 Unit 06 - Fugitive Emissions

7.6.1 Description

Fugitive emissions are defined as those emissions, which would not reasonably pass through a stack, vent or other functionally equivalent opening.

7.6.2 List of Emission Units and Pollution Control Equipment

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|---------------|--|------------------|----------------------------|
| 06 | VOM Emission Sources: Coolant Emissions Plant-Wide Mineral Spirits Clean-Up Solvents | After 1972 | None |
| | PM Emission Sources: Unpaved Roads Paved Roads | After 1972 | Sweeping, Dust Suppression |

7.6.3 Applicability Provisions and Applicable Regulations

- a. The "affected fugitive emission sources" for the purpose of these unit-specific conditions, are emission sources described in Conditions 7.6.1 and 7.6.2.
- b. The affected PM fugitive emission sources are subject to regulations cited in condition 5.2.2.
- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, or 218.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall only apply to photochemically reactive material [35 IAC 218.301].
- d. Unit 06 is subject to the opacity limits identified in Condition 5.3.2(b).

7.6.4 Non-Applicability of Regulations of Concern

None

7.6.5 Control Requirements and Work Practices

- a. In accordance with the fugitive dust plan.
- b. Clean up solvent usage done in accordance with good operating procedures.

7.6.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.5, the fugitive emission sources are subject to the following:

None

7.6.7 Testing Requirements

None

7.6.8 Monitoring Requirements

In accordance with the fugitive dust plan.

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected fugitive emission sources to demonstrate compliance with Conditions 5.5.1 and 7.6.7, pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of solvent used (gal/yr);
- b. Records of good operating procedures; and
- c. Quantity of days paved and unpaved roads traveled.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations by the affected fugitive emission sources from the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

None

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

Compliance with the limits in Conditions 5.5 and 7.6.6 shall be based on the recordkeeping requirements in Condition 7.6.9 and the following formula:

$$\text{VOM emissions (tons/yr)} = \text{Solvent usage (gal/yr)} \times \text{Density (lb/gal)} / 2000$$

Emissions from paved and unpaved roads shall be calculated based on the following emission factors and formulas:

$$\text{PM emissions (tons/yr)} = \text{Days/yr (13.7 lbs/day from Unpaved roads + 28.1 lbs/day from paved roadways)} / 2000$$

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after _____ **Error! Bookmark not defined.** (the date of issuance of the proposed permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test

methods), recordkeeping, reporting, or compliance certification requirements;

- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit.

Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA

every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit [Section 39.5(7) (f) of the Act]:

| <u>Monitoring Period</u> | <u>Report Due Date</u> |
|--------------------------|------------------------|
| January - June | September 1 |
| July - December | March 1 |

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7) (a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The

test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:
 - i. Illinois EPA - Air Compliance Unit

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Quality Planning Section

Illinois Environmental Protection Agency
Bureau of Air
Air Quality Planning Section (MC 39)
P.O. Box 19276
Springfield, Illinois 62794-9276

iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the CAA (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a revision or combination of conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule.

9.1.2 In particular, this permit does not alter or affect the following [Section 39.5(7)(j)(iv) of the Act]:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located 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 during hours of operation any sources, equipment (including monitoring and air pollution control equipment),

practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any regulated activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12) (b) (iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7) (e) (ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7) (p) (v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Unit, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the

certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence [Section 39.5(7)(k) of the Act]:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed

description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit.
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program.
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Section 39.5(5)(l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal

application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

10.0 ATTACHMENTS

Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

Attachment 2 Emissions of Particulate Matter from Process Emission Units

- a. New Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321].
- i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

where:

P = Process weight rate; and
 E = Allowable emission rate; and,

A. Up to process weight rates of 408 Mg/hr (450 T/hr):

| | <u>Metric</u> | <u>English</u> |
|---|---------------|----------------|
| P | Mg/hr | T/hr |
| E | kg/hr | lb/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

B. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

| | <u>Metric</u> | <u>English</u> |
|---|---------------|----------------|
| P | Mg/hr | T/hr |
| E | kg/hr | lb/hr |
| A | 11.42 | 24.8 |
| B | 0.16 | 0.16 |

iii. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

| Metric P <u>Mg/hr</u> | E <u>kg/hr</u> | English P <u>T/hr</u> | E <u>lb/hr</u> |
|-----------------------------|-------------------|-----------------------------|-------------------|
| 0.05 | 0.25 | 0.05 | 0.55 |
| 0.1 | 0.29 | 0.10 | 0.77 |
| 0.2 | 0.42 | 0.2 | 1.10 |
| 0.3 | 0.64 | 0.30 | 1.35 |
| 0.4 | 0.74 | 0.40 | 1.58 |
| 0.5 | 0.84 | 0.50 | 1.75 |
| 0.7 | 1.00 | 0.75 | 2.40 |
| 0.9 | 1.15 | 1.00 | 2.60 |
| 1.8 | 1.66 | 2.00 | 3.70 |
| 2.7 | 2.1 | 3.00 | 4.60 |
| 3.6 | 2.4 | 4.00 | 5.35 |
| 4.5 | 2.7 | 5.00 | 6.00 |
| 9.0 | 3.9 | 10.00 | 8.70 |
| 13.0 | 4.8 | 15.00 | 10.80 |
| 18.0 | 5.7 | 20.00 | 12.50 |
| 23.0 | 6.5 | 25.00 | 14.00 |
| 27.0 | 7.1 | 30.00 | 15.60 |
| 32.0 | 7.7 | 35.00 | 17.00 |
| 36.0 | 8.2 | 40.00 | 18.20 |
| 41.0 | 8.8 | 45.00 | 19.20 |
| 45.0 | 9.3 | 50.00 | 20.50 |
| 90.0 | 13.4 | 100.00 | 29.50 |
| 140.0 | 17.0 | 150.00 | 37.00 |
| 180.0 | 19.4 | 200.00 | 43.00 |
| 230.0 | 22.0 | 250.00 | 48.50 |
| 270.0 | 24.0 | 300.00 | 53.00 |
| 320.0 | 26.0 | 350.00 | 58.00 |
| 360.0 | 28.0 | 400.00 | 62.00 |
| 408.0 | 30.1 | 450.00 | 66.00 |
| 454.0 | 30.4 | 500.00 | 67.00 |

b. Existing Process Emission Units for Which Construction or Modification Prior to April 14, 1972 [35 IAC 212.322].

- i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and
 E = Allowable emission rate; and,

A. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

| | <u>Metric</u> | <u>English</u> |
|---|---------------|----------------|
| P | Mg/hr | T/hr |
| E | kg/hr | lb/hr |
| A | 1.985 | 4.10 |
| B | 0.67 | 0.67 |
| C | 0 | 0 |

B. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

| | <u>Metric</u> | <u>English</u> |
|---|---------------|----------------|
| P | Mg/hr | T/hr |
| E | kg/hr | lb/hr |
| A | 25.21 | 55.0 |
| B | 0.11 | 0.11 |
| C | - 18.4 | - 40.0 |

iii. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

| Metric P <u>Mg/hr</u> | E <u>kg/hr</u> | English P <u>T/hr</u> | E <u>lb/hr</u> |
|-----------------------------|-------------------|-----------------------------|-------------------|
| 0.05 | 0.27 | 0.05 | 0.55 |
| 0.1 | 0.42 | 0.10 | 0.87 |
| 0.2 | 0.68 | 0.2 | 1.40 |
| 0.3 | 0.89 | 0.30 | 1.83 |
| 0.4 | 1.07 | 0.40 | 2.22 |
| 0.5 | 1.25 | 0.50 | 2.58 |
| 0.7 | 1.56 | 0.75 | 3.38 |
| 0.9 | 1.85 | 1.00 | 4.10 |
| 1.8 | 2.9 | 2.00 | 6.52 |
| 2.7 | 3.9 | 3.00 | 8.56 |
| 3.6 | 4.7 | 4.00 | 10.40 |
| 4.5 | 5.4 | 5.00 | 12.00 |
| 9.0 | 8.7 | 10.00 | 19.20 |
| 13.0 | 11.1 | 15.00 | 25.20 |
| 18.0 | 13.8 | 20.00 | 30.50 |
| 23.0 | 16.2 | 25.00 | 35.40 |
| 27.2 | 18.15 | 30.00 | 40.00 |
| 32.0 | 18.8 | 35.00 | 41.30 |
| 36.0 | 19.3 | 40.00 | 42.50 |
| 41.0 | 19.8 | 45.00 | 43.60 |
| 45.0 | 20.2 | 50.00 | 44.60 |
| 90.0 | 23.2 | 100.00 | 51.20 |
| 140.0 | 25.3 | 150.00 | 55.40 |
| 180.0 | 26.5 | 200.00 | 58.60 |
| 230.0 | 27.7 | 250.00 | 61.00 |
| 270.0 | 28.5 | 300.00 | 63.10 |
| 320.0 | 29.4 | 350.00 | 64.90 |
| 360.0 | 30.0 | 400.00 | 66.20 |
| 400.0 | 30.6 | 450.00 | 67.70 |
| 454.0 | 31.3 | 500.00 | 69.00 |

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

There are no specific emission units that require a CAM plan as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

www.epa.state.il.us/air/caapp/199-caapp.pdf

www.epa.state.il.us/air/permits/197-fee.pdf

10.5 Attachment 5 - Tables

Table I

Fuel Usage and NO_x Emission Limits
for the Engine Durability Test Cells

| <u>Test Cell</u> | <u>Fuel Usage</u> | | <u>NO_x Emission Factor (Lb/1,000 Gal)</u> | <u>NO_x Emissions</u> | |
|------------------|-------------------|------------------|--|---------------------------------|-----------------|
| | <u>(Gal/Mo)</u> | <u>(Gal/Yr)</u> | | <u>(Ton/Mo)</u> | <u>(Ton/Yr)</u> |
| MU-1 | 133,000 | 1,330,000 | 713.7 | 48 | 476 |
| MU-4 | 171,300 | 1,713,000 | 705.2 | 60 | 604 |
| MU-5 | <u>132,000</u> | <u>1,320,000</u> | 721.3 | <u>48</u> | <u>476</u> |
| Totals | 436,300 | 4,363,000 | | 156 | 1,556 |

These fuel usage and NO_x emission limits are based upon the maximum annual fuel usage and annual emissions indicated in the permit application. The emission factors for MU-1 and MU-5 are obtained from previously required stack testing on MU-1 and MU-5. The emission factor for MU-4 was developed from the maximum annual fuel usage and the maximum annual NO_x emissions indicated in the permit application. The emissions factors are expressed in pounds NO_x per 1000 gallons of diesel fuel used.

Table II

Other Emission Limits for the Engine Durability Test Cells

| <u>Test Cell</u> | <u>SO₂</u> | | <u>CO</u> | | <u>VOM</u> | | <u>PM</u> | | <u>PM₁₀</u> | |
|------------------|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------------|---------------|
| | <u>(T/Mo)</u> | <u>(T/Yr)</u> | <u>(T/Mo)</u> | <u>(T/Yr)</u> | <u>(T/Mo)</u> | <u>(T/Yr)</u> | <u>(T/Mo)</u> | <u>(T/Yr)</u> | <u>(T/Mo)</u> | <u>(T/Yr)</u> |
| MU-1 | 2.31 | 23.1 | 3.11 | 31.1 | 0.82 | 8.2 | 0.78 | 7.8 | 0.53 | 5.3 |
| MU-4 | 2.97 | 29.7 | 4.01 | 40.1 | 1.05 | 10.5 | 1.00 | 10.0 | 0.68 | 6.8 |
| MU-5 | <u>2.29</u> | <u>22.9</u> | <u>3.09</u> | <u>30.9</u> | <u>0.81</u> | <u>8.1</u> | <u>0.77</u> | <u>7.7</u> | <u>0.53</u> | <u>5.3</u> |
| Totals | 7.57 | 75.7 | 10.21 | 102.1 | 2.68 | 26.8 | 2.55 | 25.5 | 1.74 | 17.4 |

Emission Factors
(Lbs/1,000 Gal)

| <u>Test Cell</u> | <u>Emission Factors (Lbs/1,000 Gal)</u> | | | | | |
|------------------|---|-----------|------------|-----------|------------------------|--|
| | <u>SO₂*</u> | <u>CO</u> | <u>VOM</u> | <u>PM</u> | <u>PM₁₀</u> | |
| MU-1 | 34.67 | 46.81 | 12.30 | 11.70 | 8.00 | |
| MU-4 | 34.67 | 46.81 | 12.30 | 11.70 | 8.00 | |
| MU-5 | 34.67 | 46.81 | 12.30 | 11.70 | 8.00 | |

* SO₂ emissions will be based on monthly diesel fuel sulfur analysis when available. Otherwise the SO₂ emission factors from the above table will be utilized.

These emission limits are based upon the maximum annual fuel usage and annual emissions indicated in the application. The emission factors were developed from the maximum annual fuel usage and the maximum

annual emissions indicated in the permit application and are expressed in pounds pollutant per 1000 gallon of diesel fuel used.

The Calculated SO₂ Emission Factor (Lb/1,000 Gal) = Density of the Fuel (Lb/Gal) x Sulfur Content of Fuel (Lbs Sulfur/Lbs Fuel) x 1.998 (Lbs SO₂/Lb S₂) x 1,000

SIS:psj