



TABLE OF CONTENTS

	<u>PAGE</u>
1.0 SOURCE IDENTIFICATION	4
1.1 Source	
1.2 Owner/Parent Company	
1.3 Operator	
1.4 General Source Description	
2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	5
3.0 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 Source Description	
5.2 Applicable Regulations	
5.3 Non-Applicability of Regulations of Concern	
5.4 Source-Wide Operational and Production Limits and Work Practices	
5.5 Source-Wide Emission Limitations	
5.6 General Recordkeeping Requirements	
5.7 General Reporting Requirements	
5.8 General Operational Flexibility/Anticipated Operating Scenarios	
5.9 General Compliance Procedures	
6.0 EMISSION REDUCTION MARKET SYSTEM (ERMS)	17
6.1 Description of ERMS	
6.2 Applicability	
6.3 Obligation to Hold Allotment Trading Units (ATUs)	
6.4 Market Transaction	
6.5 Emission Excursion Compensation	
6.6 Quantification of Seasonal VOM Emissions	
6.7 Annual Account Reporting	
6.8 Allotment of ATUs to the Source	
6.9 Recordkeeping for ERMS	
6.10 Federal Enforceability	
6.11 Exclusion from Further Reductions	

	<u>PAGE</u>	
7.0	UNIT SPECIFIC CONDITIONS	24
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	
7.5	Unit 05 Carrier line solvent washer	
7.6	Unit 06 Fugitive emissions	
8.0	GENERAL PERMIT CONDITIONS	55
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	Obligation to Comply with Title I Requirements	
9.0	STANDARD PERMIT CONDITIONS	60
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	
10.0	ATTACHMENTS	
10.1	Attachment 1 - Particulate Matter Emission Table New Emission Units	1-1
10.2	Attachment 2 - Particulate Matter Emission Table Existing Emission Units	2-1
10.3	Attachment 3 - Example Certification by a Responsible Official	3-1
10.4	Attachment 4 - Tables	4-1

1.0 SOURCE IDENTIFICATION

1.1 Source

General Motors Corporation (GMC), Electro-Motive Division  
Attn: Jack Kaps, Assistant Superintendent Env. Eng.  
9301 West 55th Street  
McCook, Illinois 60525  
708/387-5904

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

1.2 Owner/Parent Company

General Motors Corporation  
100 Renaissance Center Drive  
Detroit, Michigan 48243-7301

1.3 Operator

GMC-Electro-Motive Division  
Attn: Jack Kaps, Assistant Superintendent Env. Eng.  
9301 West 55th Street  
McCook, Illinois 60525  
708/387-5904

1.4 General Source Description

The Electro-Motive Division of General Motors Corporation (GMC), is located at 9301 West 55th Street in McCook, which is located in Cook County. The Electro-Motive Division 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.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

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
ACMA	Alternative Compliance Market Account
ATUs	Allotment Trading Units
Btu	British thermal unit
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emission Reduction Market System
°F	degrees Fahrenheit
Ft <sup>3</sup>	cubic foot
Gal	Gallon
Gm	Gram
HAP	Hazardous Air Pollutant
Hp	horse power
Hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
°K	degrees Kelvin
Kg	kilo gram
kW	Kilowatts
lb	Pound
MACT	Maximum Available Control Technology
mmcf	Million cubic feet
MG	Megagram
M	Meter
mmBtu	Million British thermal units
mo	Month
MW	Megawatts
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
OM	Organic Material
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
psia	pounds per square inch absolute
scf	standard cubic foot

SO <sub>2</sub>	Sulfur Dioxide
T	Ton
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
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
wt.	Weight
yr	Year

### 3.0 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 Long Hoods
- 1 - Machine and Assembly Turbo Line
- 1 - Machine and Assembly Head Line
- 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:

- 29 - Alkaline Washers
- 5 - Magnaflux Tanks
- 6 - 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 less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

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)].

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).

#### Maintenance Paint Booth

### 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 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 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. 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.

3.2.3 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 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

### 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	Emission Unit Description	Date Constructed	Emission Control
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 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of NO<sub>x</sub>, PM<sub>10</sub>, VOM and HAP emissions.

5.1.2 For purposes of the CAAPP and Title I of the Clean Air Act, GMC-Electromotive Division is considered a single source with NICOR Solutions, I.D. No. 031174ACH, located at 9301 West 55<sup>th</sup> Street, McCook. The source has elected to obtain separate CAAPP permits for these locations.

### 5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 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.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b.
  - i. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].
  - ii. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

iii. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

c. 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, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 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.

5.2.4 Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [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 Risk

Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

- 5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC 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 40 CFR Part 70 or 71.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, 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.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

- i. Illinois EPA, Compliance Section; and
- ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
- iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 PM<sub>10</sub> Contingency Measure Plan

This stationary source, as defined in 35 IAC 212.700, is required to prepare and submit a contingency measure plan reflecting the PM<sub>10</sub> emission reductions as set forth in 35 IAC 212.703. Such plan is incorporated by reference into this permit and shall be implemented in accordance with 35 IAC 212.704. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U, incorporated herein by reference.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 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 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	109.7
Sulfur Dioxide (SO <sub>2</sub> )	148.0
Particulate Matter (PM)	75.7
Nitrogen Oxides (NO <sub>x</sub> )	2,934.0
HAP, not included in VOM or PM	-----
TOTAL	3,267.4

5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 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 as soon as is reasonably practical 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.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance 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.

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

## 6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

### 6.1 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. Once the ERMS begins, 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 during initial issuance of 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).

### 6.2 Applicability

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

### 6.3 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 6.8, 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 6.5.
  - 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 6.8(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.

### 6.4 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.

#### 6.5 Emissions Excursion Compensation

Pursuant to 35 IAC 205.720, if the source fails to hold ATUs in accordance with Condition 6.3, 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.

## 6.6 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.

## 6.7 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.

#### 6.8 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.
    - A. This determination includes the use of 1993 and 1997 as baseline seasons. This determination includes use of the 1993 and 1997 seasons as a substitute for the 1994 and 1995 seasons due to non-representative conditions in this season, as allowed by 35 IAC 205.320(a)(2).
  - 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 6.11 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.

v. Condition 6.3(a) becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.

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.

#### 6.9 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 6.6(a); and

c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

#### 6.10 Federal Enforceability

Section 6 becomes federally enforceable upon approval of the ERMS by USEPA as part of Illinois' State Implementation Plan.

#### 6.11 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 units excluded from further reduction:

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

7.0 UNIT SPECIFIC CONDITIONS

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 Pollution Control Equipment

Emission Unit	Date Constructed	Emission Control
Alternator Assembly Line	After 1972	None
Crankcase & 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 Applicability Provisions and Applicable 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 PM<sub>10</sub>, 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. 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].
- e. Each affected process emission unit is subject to the emission limits identified in Condition 5.2.2.

#### 7.1.4 Non-Applicability of Regulations of Concern

- a. The affected process emission unit is not subject to 35 IAC 217.121 for emissions of nitrogen oxides from new fuel combustion emission sources, because the affected process emission unit is not by definition a fuel combustion emission unit.
- b. The affected process emission unit is not subject to 35 IAC 216.121 for emissions of carbon monoxide, because the affected process emission unit is not by definition a fuel combustion emission unit.
- c. The affected process emission unit is not subject to 35 IAC 214.301 because process emissions of sulfur dioxide from each affected process emission unit are so small that this rule cannot be reasonably applied.

#### 7.1.5 Control Requirements

None

#### 7.1.6 Emission Limitations

In addition to Condition 5.2.2, and the source-wide emission limitations in Condition 5.5.1 and 7.2.3, the affected process emission unit is subject to the following:

None

Emission limits for PM/PM<sub>10</sub>, 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 Operating Requirements

None

7.1.8 Inspection Requirements

None

7.1.9 Recordkeeping Requirements

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

- a. Hours of operation (hours/yr);
- b. Natural gas usage (mmcf/yr); and
- c. Fuel combustion emissions (ton/yr) as calculated by Section 7.1.12.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an 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:

- a. Emissions of PM, or PM<sub>10</sub> from an affected process emission unit in excess of 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

N/A

7.1.12 Compliance Procedures

- a. Compliance provisions addressing condition 7.1.3(b)&(c) are not set by this permit as compliance is assumed to be achieved by the normal work practices and maintenance activities inherent in operation of each affected process emission unit.
- b. Compliance with the emission limits in Condition 5.5 from each affected process emission unit shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

<u>Emission Unit</u>	<u>PM/PM<sub>10</sub> (lbs/hr)*</u>
Alternator Assembly	0.265
Crankcase and Oil Pan Construction	0.54
Liner Line	1.01
Piston Line	1.18
Carrier Line	0.38
Connecting Rod Line	0.46

Emissions from the Affected Process Unit (tons/yr)  
 = Emission Factor (lbs/hr) x Hours of Operation  
 (hrs/yr)/2000

\* Hourly emission rates from application including control where present.

- c. Compliance with the emission limits in Condition 5.5.1 from each affected process emission unit shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

<u>Pollutant</u>	<u>Emission Factor (lb/10<sup>6</sup> ft<sup>3</sup>)</u>
NO <sub>x</sub>	100.0
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 (ton/yr) = (natural gas usage, mmcf/yr) x  
 (the applicable emission factor, lb/mmcf) x (ton/2000  
 lb)

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	Date Constructed	Emission Control
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 Applicability Provisions and Applicable 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:

	<u>(kg/liter)</u>	<u>(lb/gal)</u>
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-Applicable 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 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the affected

coating operation is not by definition a fuel combustion emission unit.

- c. The affected coating operation is not subject to 35 IAC 217.121, Emissions of Nitrogen Oxides from New Fuel Combustion Emission Sources, because the affected coating operation is not by definition a fuel combustion emission unit.
- d. The affected coating operation is not subject to the requirements of 35 IAC 214.301 because the affected coating operation does not emit SO<sub>2</sub>, and thus, this rule cannot be reasonably applied.

7.2.5 Operational and Production Limits and Work Practices

The affected coating operation with baking oven shall only be operated with natural gas as the fuel.

7.2.6 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</u>		<u>VOM Emissions</u>	
	<u>(gal/mo)</u>	<u>(gal/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
5.5	682	5,455	1.9	15

- ii. Engine Paint Spray Booth, Permit #95120294

	<u>Coating Usage</u>		<u>VOM Emissions</u>		
	<u>(lb VOM/gal)</u>	<u>(gal/mo)</u>	<u>(gal/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
High Temperature Aluminum Coating	6.0	7	50	0.02	0.15
Extreme Performance Top Coat and Prime Coat	3.5	338	2,705	0.6	4.73

	<u>(lb VOM/gal)</u>	<u>Coating Usage</u>		<u>VOM Emissions</u>	
		<u>(gal/mo)</u>	<u>(gal/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>

Cleanup Solvent	7.2	74	588	0.3	2.12
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iii. Turbo/Alternator Paint Booth, Permit #96060014

	<u>(lb VOM/gal)</u>	<u>Coating Usage</u>		<u>VOM Emissions</u>	
		<u>(gal/mo)</u>	<u>(gal/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>

High Temperature Aluminum Coating	6.0	4	30	0.02	0.1
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Extreme Performance Top Coat and Prime Coat	3.5	100	800	0.2	1.4
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Cleanup Solvent	6.74	71	567	0.3	1.91
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iv. Ransohoff Spray Booth, Permit #92080058

<u>(lb VOM/gal)</u>	<u>Coating Usage</u>		<u>VOM Emissions</u>	
	<u>(gal/mo)</u>	<u>(gal/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>

0.29	450	3,600	0.3	2.0
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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 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 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 Inspection Requirements

N/A

#### 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. The usage of each coating (gal/mo and gal/yr)\*;
  - iii. Density of each coating (lb/gal);
  - iv. VOM content of each coating (wt %) from testing or from supplier MSDS;
  - v. 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

- vi. 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 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 content of each coating (wt. %);
  - v. Documentation of analysis methodology; and
  - vi. Person performing analysis.
- c. VOM 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) as calculated by Condition 7.2.12.

#### 7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected coating operation 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:

- a. Pursuant to 35 IAC 218.211(c)(3)(A), the Permittee shall notify the Illinois EPA of any record showing violation of 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 in excess of 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(b) 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(b) 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)

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

Where:

w<sub>i</sub> = Percent exempt compound i in the coating,

d<sub>i</sub> = Overall density of exempt compound i, in lb/gal and the summation  $\sum$  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/10<sup>6</sup> ft<sup>3</sup>)</u>
NO <sub>x</sub>	100.0
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

The GMC 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.

GMC has requested a permit for modifications to its existing engine durability test cell MU-1 which was constructed prior to 1972 to allow it to test a new Model H engine. The equipment to be constructed includes engine holding fixtures, lubrication equipment, inlet and exhaust air ducting, fuel supply, a cooling water heat exchanger, an electric generator, an electric grid to dissipate the electricity as heat, miscellaneous piping, monitoring equipment, and associated building facilities and equipment to check the performance of the engines as operated during the testing procedure.

7.3.2 List of Emission Units and Pollution Control Equipment

Description	Date Constructed
Engine and Turbo Production Test Cells	Before 1970
R and D Test Cells	Before 1970
Engine Durability Test Cells MU1 through MU5	MU1 Modified 1999 MU2 Before 1972 MU3 Before 1972 MU4 in 1982 MU5 in 1989

7.3.3 Applicable 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. Each affected engine test cell is subject to the emission limits identified in Condition 5.2.2.
- c. 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].
- d. 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].

#### 7.3.4 Non-Applicability of Regulations of Concern

- a. The affected engine test cells are not subject to 35 IAC 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected engine test cells are not by definition fuel combustion emission units.
- b. The affected engine test cells are not subject to 35 IAC 217.141, emissions of nitrogen oxides from process emission sources, because the process is not using nitric acid.
- 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 Operational and Production Limits and Work Practices

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

#### 7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the affected engine test cells are subject to the following:

- a. The NO<sub>x</sub> 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<sub>x</sub> emissions, as approved by the Illinois EPA.

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<sub>x</sub> 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 (SO<sub>2</sub>), carbon monoxide (CO), particulate matter (PM), and PM<sub>10</sub> 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.
- ii.
    - A. The Permittee shall notify the Illinois EPA prior to testing any engine design other than the Model 710 or AH® engine.
    - B. The Permittee shall obtain prior written approval from the Illinois EPA prior to testing an engine that does not include turbocharging and aftercooling.
  - iii. 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.
- c.
    - i. As a result of the conditions for the test cells in this permit and Condition 3(b), this permit is issued based upon these test cells not constituting new major sources or major modifications for VOM or PM<sub>10</sub> pursuant to 35 Ill. Adm. Code Part 203. The VOM emission netting exercise which was performed as a result of this application is summarized in Tables III (See Attachment 4).
    - ii. This permit is based upon negligible emissions of VOM from the two storage Tanks EE (covered by permit No. 80100012). For this purpose emissions shall not exceed nominal emission rates of 0.023 lb/hr and 0.10 ton/yr from each

tank. This condition is necessary to provide federally enforceable limits for this emission unit for purposes of the VOM netting exercise. This emission unit was not previously limited in a federally enforceable permit.

- d. 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. The provision is not federally 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 not federally enforceable.

#### 7.3.7 Testing Requirements

- a. The emissions of NO<sub>x</sub>, PM, VOM, and CO in the effluent stream of test cells MU-1, MU-4, and MU-5 shall be measured as required by the construction permit #96080040 to determine compliance with Condition 7.3.6.bi(C) and (D).
- b. These emission tests shall be performed by an approved independent emission testing service during conditions which are representative of maximum mass emissions.
- c. The following methods and procedures shall be used for emission testing unless another method is approved by the Illinois EPA:
  - i. Particulate Matter California Regulations for new 1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines (incorporated by reference under 40 CFR 89.6)
  - Nitrogen Oxides 40 CFR Part 89, Subpart E

Carbon Monoxide                    40 CFR Part 89, Subpart  
E

Volatile Organic  
Material                            40 CFR Part 60, Method  
25 or 25A

- ii. All particulate matter emissions measured by the method indicated above shall be considered  $PM_{10}$ , unless  $PM_{10}$  emissions are specifically tested by USEPA Method 201 or 201A.
  - iii. Sulfur dioxide emissions shall be determined by assuming all sulfur contained in the fuel is emitted as sulfur dioxide.
- d. The Illinois EPA shall be notified prior to these emission tests to enable the Illinois EPA to observe these emission tests. Notification for the expected date of emission testing shall be submitted a minimum of thirty (30) days prior to the expected date. Notification of the actual date and expected time of emission testing shall be submitted a minimum of five (5) working days prior to the actual date of the emission test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe emission testing.
- e. Copies of the Final Report for these emission tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized prior to or accompanying the operating permit application. Satisfactory completion of these emission tests and compliance with the limitations of this permit shall be a prerequisite to the issuance of an operating permit. The Final Report shall include as a minimum:
- i. A summary of results.
  - ii. General information describing the emission test, including the name and identification of the emission unit which was tested, date of test, names of personnel performing the tests, and Illinois EPA observers, if any.
  - iii. A description of emission test procedures, including description of sampling points,

sampling train, analysis equipment, and test schedule.

- iv. A detailed description of emission test conditions, including process information, i.e., mode of operation, (sulfur and ash content in the diesel fuel), and process rate, (fuel consumption).
- v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- f.
  - i. Within 90 days of a written request from the Illinois EPA, the emission of sound from the property-line-noise-source shall be measured to demonstrate compliance with the allowable octave and one-third octave band sound pressure levels (dB) under 35 IAC Part 901.
  - ii. These emission tests shall be performed by an approved independent emissions testing service during conditions which are representative of maximum emissions pursuant to the measurement procedures of 35 IAC Section 900.103.

#### 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. 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.
- b. The Permittee shall maintain records of the following items to allow the Illinois EPA to review compliance with the requirements of this permit.
  - i. Fuel usage for each testing cell (gal/mo and gal/yr), and

- ii. Fuel analysis sheets indicating sulfur and ash content for each month.
- c. Any records or logs required by this Permit shall be retained at a readily accessible location at the plant for at least three 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 noncompliance of the affected engine test cells with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of deviations, and any corrective actions or preventive measures taken:

- a. If there is an exceedance of 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 exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- b. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
  - i. Fuel usage for each testing cell (gal/yr), and
  - ii. A summary of the sulfur and ash content for each month.

If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

- c. Two (2) copies of reports and notifications required by this permit shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

- d. One (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
 Division of Air Pollution Control  
 Eisenhower Tower  
 1701 South First Avenue  
 Maywood, Illinois 60153

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. Compliance with Conditions 7.3.3(b) is assured by the work-practices inherent in operation of the affected engine test cells.
- b. Compliance with Condition 7.3.3(c) is demonstrated by operation of the affected engine test cells with distillate fuel oil with a sulfur content meeting the specification of Condition 7.3.6(b)(i)(B).
- c. To determine compliance with Condition 5.5.1, emissions from the affected engine test cells shall be calculated based on the following emission factors and formulas:

Test Cells	Emission Factor* (lb/1,000 gal)				
	NO <sub>x</sub>	SO <sub>2</sub>	VOM	PM	PM <sub>10</sub>
R and D	797.0	40.0	17.0	14.0	9.52
Production	797.0	40.0	17.0	14.0	9.52
MU1, MU4, MU5	705.20	34.67	12.30	11.70	8.00
MU2, MU3	648.5	34.45	10.02	11.78	7.91

\* Emission factors are from the application

Engine Test Cell Emissions (T) = Distillate Fuel Oil Consumed, (gal) x The Appropriate Emission Factor, (lb/1,000 gal)/2000

7.3.13 Compliance Schedules

- a. The emission units MU1, MU4, and MU5 shall comply with the following schedule of compliance in regards to the requirements of the construction permit #96080040:

Milestone	Timing
The Permittee shall achieve full compliance with all applicable regulations and any terms and conditions specified in Condition 7.3.3.	No Later Than September 30, 2000

b. Submittal of Progress Reports

A Progress Report shall be submitted every six months, beginning six months from the date of issuance of this permit till the compliance mile stone has been met. The Progress Report shall contain at least the following:

- i. The required timeframe for achieving the milestones in the schedule for compliance, and actual dates when such milestones were achieved.
- ii. An explanation of why any required timeframe in the schedule of compliance was not met, and any preventive or corrective measures adopted.

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	Emission Control
TF8	2,500 Gallons Gasoline Storage Tank	Submerged Loading
TF5	5,000 Gallons Petroleum Solvent Storage Tank	Submerged Loading

7.4.3 Applicability Provisions

- 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)]. Except as provided in the following exemptions: If the tank is a pressure tank then the limitations of 35 IAC 218.122(b) shall not apply [35 IAC 218.122(c)] or if no odor nuisance exists then the limitation of 35 IAC 218.122(b) shall only apply when the tank is used to store a volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70°F [35 IAC 218.122(d)].
- 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)].

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.

7.4.5 Operational and Production Limits 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 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

None

7.4.8 Inspection and 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; and
- 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.

#### 7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected storage tank 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:

- a. Any loading of gasoline or other VOL into an affected tanks that was not in compliance with Condition 7.4.5, e.g., no "submerged loading pipe or submerged fill" within five days of becoming aware of the noncompliance status. This notification shall include a description of the event, the cause for the noncompliance, actions taken to correct the noncompliance and the steps taken to avoid future noncompliance.
- b. Any storage of gasoline or other VOL in an affected tanks that is out of compliance with 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 noncompliance status. This notification shall include a description of the event, the cause for the noncompliance, actions taken to correct the noncompliance, and the steps to be taken to avoid future noncompliance.

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

#### 7.4.12 Compliance Procedures

Compliance with the emission limits in condition 5.5 and 7.4.6 shall be based on the recordkeeping requirements in Condition 7.4.9 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

Description	Emission Control Equipment
Solvent Washer Tank	None

7.5.3 Applicability Provisions and Applicable 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 Agency and further processed consistent with Section 218.108 of this Part. Such a system may include a water cover, refrigerated chiller or carbon adsorber.
- iv. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser.

#### 7.5.4 Non-Applicability of Regulations of Concern

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.

7.5.5 Operational and Production Limits 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 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

None

7.5.8 Monitoring Requirements

None

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.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected cold cleaning tank 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:

- a. An estimate of cleaning solvent consumption during the reporting period.

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 as specified in the Material Safety Data Sheet, 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

Description	Emission Control Equipment
VOM Emission Sources: Coolant Emissions Plant-Wide Mineral Spirits Clean-Up Solvents	
PM Emission Sources: Unpaved Roads Paved Roads	Sweeping and 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].

7.6.4 Non-Applicability of Regulations of Concern

- a. The affected fugitive emission sources of PM are not subject to the requirements of 35 IAC 212.321, Emissions of Particulate Matter from Process Emission Units, because due to the unique nature of this process, such rules cannot reasonably be applied.

7.6.5 Operational and Production Limits and Work Practices

None

7.6.6 Emission Limitations

In addition to Condition 5.2.2 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 Inspection Requirements

None

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).

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected fugitive emission sources 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:

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:

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

PM emissions (tons/yr) = 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 March 6, 2000 (the date of issuance of the draft 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 without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA,

emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change, and 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 [Section 39.5(12)(a) of the Act]. This notice shall:

- a. Describe the physical or operational change;
- b. Identify the schedule for implementing the physical or operational change;
- c. 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;
- d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
- e. 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. 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 Condition 8.6.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [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 determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s), which 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. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

- i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency (MC 40)  
Bureau of Air  
Compliance Section  
P.O. Box 19276  
Springfield, Illinois 62794-9276

- ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Eisenhower Tower  
1701 South First Avenue  
Maywood, Illinois 60153

iii. Illinois EPA - Air Permit Section (MC 11)

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

iv. USEPA Region 5 - Air Branch

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

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

#### 8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

## 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 [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- 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, 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, 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 such malfunction or breakdown is allowed by a permit condition [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 thereunder.

#### 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, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(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
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source.

#### 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. As 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 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, Compliance 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 Section, 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 [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment 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:
  - 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. Normally, an act of God such as lightning or flood is considered an emergency;
  - 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.

#### 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, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, 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 inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

### 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 under Section 39.5(15)(b) 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, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. 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

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

10.1.1 Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

- a. 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 [35 IAC 212.321(a)].
- b. 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,

- i. Up to process weight rates of 408 Mg/hr (450 ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	Lb/hr
A	1.214	2.54
B	0.534	0.534

- ii. For process weight rate greater than or equal to 408 Mg/hr (450 ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	Lb/hr
A	11.42	24.8
B	0.16	0.16

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

Metric		English	
P	E	P	E
Mg/hr	kg/hr	ton/hr	lb/hr
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	7.2	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

Where:

P = Process weight rate in Mg/hr or T/hr; and  
E = Allowable emission rate in Kg/hr or lbs/hr

10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

10.2.1 Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

- a. 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)].
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section 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,

- i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	ton/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67

- ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	ton/hr
E	kg/hr	lb/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

- c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

	Metric	English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	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.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	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

Where:

P = Process weight rate in Mg/hr or T/hr; and  
E = Allowable emission rate in Kg/hr or lbs/hr

10.3 Attachment 3 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: \_\_\_\_\_

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10.4 Attachment 4 Tables

Table I

Fuel Usage and NO<sub>x</sub> Emission Limits  
for the Engine Durability Test Cells

<u>Test Cell</u>	<u>Fuel Usage</u>		<u>NO<sub>x</sub> Emission Factor (Lb/1,000 Gal)</u>	<u>NO<sub>x</sub> Emissions</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
MU-1	135,000	1,350,000	705.2	48	476
MU-4	171,300	1,713,000	705.2	60	604
MU-5	135,000	1,350,000	705.2	48	476
Totals	441,300	4,413,000		156	1,556

These fuel usage and NO<sub>x</sub> emission limits are based upon the maximum annual fuel usage and annual emissions indicated in the permit application. The emission factors were developed from the maximum annual fuel usage and the maximum annual NO<sub>x</sub> emissions indicated in the permit application and are expressed in pounds NO<sub>x</sub> per 1000 gallons of diesel fuel used.

Table II

Other Emission Limits for the Engine Durability Test Cells

<u>Test Cell</u>	<u>SO<sub>2</sub></u>		<u>CO</u>		<u>VOM</u>		<u>PM</u>		<u>PM<sub>10</sub></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	2.34	23.4	3.16	31.6	0.83	8.3	0.79	7.9	0.54	5.4
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>2.34</u>	<u>23.4</u>	<u>3.16</u>	<u>31.6</u>	<u>0.83</u>	<u>8.3</u>	<u>0.79</u>	<u>7.9</u>	<u>0.54</u>	<u>5.4</u>
Totals	7.65	76.5	10.33	103.3	2.71	27.1	2.58	25.8	1.76	17.6

Emission Factors  
(Lb/1000 Gal)

<u>Test Cell</u>	<u>SO<sub>2</sub></u>	<u>CO</u>	<u>VOM</u>	<u>PM</u>	<u>PM<sub>10</sub></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

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.

Note that the PM and PM<sub>10</sub> emission increases do not trigger the level at which the project would be considered significant, 25 and 15 ton/yr, respectively, since these cells are separate projects having been constructed in different years.

Table III

Current VOM Increase

<u>Permit</u>	<u>Emission Unit</u>	<u>New Permitted Emissions (T/Yr)</u>	<u>Prior Actual Emissions (T/Yr)</u>	<u>Change in Emissions (T/Yr)</u>
96080040	Test Cell MU-1	+ 8.3	- 3.3*	+ 5.00
96080040	Test Cell MU-5	+ 8.3	- 0.9**	+ 7.40
Total				+ 12.40

\* Emissions from MU-1 as historically used to test the Model 710 engine, based upon data for 1992 and 1995. Not considered as representative years for the purpose of estimating actual emissions from this test cell were 1993 and 1994 due to extensive downtime for this cell during these two years.

\*\* Emissions from MU-5 as historically used to test the Model 710 engine.

MU-4 was not included in this netting process since the cell was constructed prior to the 5 year contemporaneous timeframe and is not undergoing a physical change or change in the method of operation at this time.

Contemporaneous VOM Increases

<u>Date Issued</u>	<u>Permit</u>	<u>Emission Unit</u>	<u>(T/Yr)</u>
9/16/92	92080058	Ransohoff Spray Booth	2.00
9/23/93	80100012	Tank EE-2 storage tanks	0.20
8/04/94	94070042	Molykote Spray Booth	0.10
8/17/94	94060049	2 Turbo Parts Washer	0.44
3/24/95	94120072	Stator Coil Brazing Station	0.22
9/21/95	95060230	Varnish Dipping	8.83
9/22/95	95070120	Storage Tanks	0.60
01/12/96	95120294	Engine Paint Booth	1.55
05/01/96	96020038	Turbo Parts Washer	0.22
05/21/96	96020136	Tank TF8	0.25
06/25/96	96040018	Turbo Wheel Lab	0.25
08/14/96	96060014	Turbo/Alternator Paint Booth	2.43
08/27/96	96070074	Crankcase/Oil Pan Washer	0.22
08/27/96	96070074	Alternator Wash Booth	0.44
Total			17.75

Contemporaneous VOM Decreases

<u>Date Ceased</u>	<u>Emission Unit</u>	<u>(T/Yr)</u>
10/92	TM Armature Coils	2.81
12/92	TM Armature Straps	2.69
11/92	Mainfield Coils	2.17
3/94	Shield Dip-Black Varnish	0.62
1993	Miscellaneous Paint Booth	0.68
1993	Metal Finish Line Paint Booth	<u>1.48</u>
	Total	10.45

Net Contemporaneous VOM Emission Increase

Current Increase	+ 12.4
Contemporaneous Increase	+ 17.75
Contemporaneous Decrease	<u>- 10.45</u>
	+ 19.70

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