

FINAL DRAFT/PROPOSED CAAPP PERMIT
Caterpillar Inc. - East Peoria (TTTTD & TBU)
I.D. No.: 179020AAB
Application No.: 95120204
September 3, 2002

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

Caterpillar Inc. - East Peoria (TTTTD & TBU)
Attn: Donald J. Mahannah, Environmental Coordinator
901 West Washington Street
East Peoria, Illinois 61630

Application No.: 95120204 I.D. No.: 179020AAB
Applicant's Designation: CONSTMACH/EQUIP Date Received: February 2, 2001
Operation of: Off-highway Machinery coating operations
Date Issued: !TO BE DETERMINED! Expiration Date²: !DATE!
Source Location: 901 West Washington Street, East Peoria, Tazewell
Responsible Official: Donald J. Mahannah, Environmental Coordinator

This permit is hereby granted to the above-designated Permittee to OPERATE a coating operation for heavy off-highway vehicle products, fuel combustion equipment, generators, soil vapor extraction system, and groundwater treatment system, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

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

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

DES:SIS:psj

cc: Illinois EPA, FOS, Region 2

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Caterpillar Inc. - East Peoria (TTTD & TBU)
901 West Washington Street
East Peoria, Illinois 61630
(309) 675-9339

I.D. No.: 179020AAB
Standard Industrial Classification: 3531, Construction Machinery
and Equipment

1.2 Owner/Parent Company

Caterpillar Inc.
100 NE Adams Street
Peoria, Illinois 61629

1.3 Operator

Caterpillar Inc. - East Peoria (TTTD & TBU)
901 West Washington Street
East Peoria, Illinois 61630

Donald J. Mahannah, Environmental Coordinator
309/675 - 3986

1.4 General Source Description

Caterpillar Inc. - East Peoria (TTTD & TBU) is located at 901 West Washington Street, East Peoria. This facility produces track-type tractors and transmissions for earth moving equipment. The modern facility is located on 700 acres and consists of seven major structures and approximately 150 acres under roof.

Track-type tractor and transmission components including machined parts, engines, hydraulic components, and electronics controls and systems are shipped to the facility for inclusion in the assembly process. Raw materials including steel plate, bar stock, castings, and forgings are also delivered to the facility and processed into completed sub-assemblies that are supplied to the final assembly process. Operations include shot blasting, metal forming, machining, heat treating, and coating. Following final assembly, the track-type tractors and transmissions are painted prior to shipment.

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Natural gas-fired boilers are operated on site to provide process steam and some plant heating. Direct fired natural gas make-up air units are also operated for plant heating purposes. Several diesel engine powered electric generators are located throughout the facility to provide emergency power.

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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
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CAS	Chemical abstracts services
CFR	Code of Federal Regulations
CO	Carbon monoxide
cfm	Cubic feet per minute
ERMS	Emissions Reduction Market System
gal	gallon
gpm	Gallon per minute
HAP	Hazardous Air Pollutant
hp	Horse power
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kW	kilowatts
KPa	Kilo pascal
LAER	Lowest Achievable Emission Rate
l	liter
lbs	pound
lb	pound
MACT	Maximum Achievable Control Technology
Mg	megagrams
MBtu	Million British thermal units
Mft ³	Million cubic feet
mo	month
MW	Megawatt
m ²	Square meter
m ³	Cubic meter
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards

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psi	Pounds per square inch
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO ₂	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
VOM	Volatile Organic Material
VMT	Vehicle miles traveled
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:

None

- 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:

Oil Quench Tanks (30)

- 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 MBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 MBtu/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 any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

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

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

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	Description	Date Constructed	Emission Control Equipment
Group 01	Coating Operations:		
	Prime/Top (SS)	4/77	Dry Filter
	Touch-Up (SS)	4/77	Dry Filter
	Prime/Top (LL)	2/95	Waterwall
	Touch-Up (LL)	1986	Dry Filter
	Special Color (LL)	1982	Dry Filter
	Transmission (KK)	8/79	Waterwall
	E-coating (Prime/Top)	2/95	None
Unit 02	Paint Pigment Reclamation System	6/95	3 Dust Collectors, 2 Filter Boxes
Unit 03	Solvent Still	4/97	None
Unit 04	4,750 Gallon Paint storage Tank	1975	Permanent Submerged Loading Pipe
Unit 05	Natural Gas Fired Boilers:		
	Boiler 23 - 90 MBtu/hr	1990	None
	Boiler 11 (FD 6) - 25.1 MBtu/hr	8/97	None
	Boiler 12 (FD-7) - 25.1 MBtu/hr	8/97	None
	Boiler 5 - 31.4 MBtu/hr	8/98	None
	Boiler 6 - 31.4 MBtu/hr	8/98	None
	Boiler 7 - 31.4 MBtu/hr	8/98	None
	Boiler 8 - 37.7 MBtu/hr	8/98	None
	Boiler 9 - 37.7 MBtu/hr	8/98	None
	Boiler KK - 12.5 MBtu/hr	8/98	None

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Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 06	Diesel Generators: CC3 W2 - Rated Output 1939 kW, 2598 hp HH - Rated Output 1350 kw, 1809 hp AD 6 - Rated Output 1468 kW, 1967 hp AD 7 - Rated Output 1468 kW, 1967 hp AD 8 - Rated Output 1903 kW, 2550 hp	12/94 9/90 1984 1984 1988	None None None None
Unit 07	Three underground Gasoline Tanks (12,000 gallons each)	6/85	Permanent Submerged Loading Pipes
UNIT 08	Gasoline Storage Tank (15,000 Gallon Capacity)	1975	Submerged Loading Pipe
Unit 09	Soil Vapor Extraction System	August 1991	Vapor Phase Activated Carbon Absorbers
Unit 10	Aeration Tanks 1 and 2, Air Stripper	April 1997	Vapor Phase Activated Carbon Absorber
Unit 11	Fugitive Emissions from Paved Roads	---	---

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_x, VOM, and HAPs emissions.

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. 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 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

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

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

5.2.4 Risk Management Plan

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 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of

the applicable regulated air pollutant that equals or exceeds major source threshold levels.

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)	392.5
Sulfur Dioxide (SO ₂)	1.8
Particulate Matter (PM)	32.7
Nitrogen Oxides (NO _x)	212.0
HAP, not included in VOM or PM	---
TOTAL	639.0

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 Records for VOM and HAP Emissions

- a. Total annual emissions of each individual HAP and of total HAPs on a calendar year basis for the applicable emission units covered by Section 7 (Unit Specific Conditions) of this permit.
- b. Total monthly and running 12 month total VOM emissions for the whole source based on the applicable emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.3 Records for Operating Scenarios

N/A

5.6.4 Records for Operating Scenarios

N/A

5.6.5 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified

by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

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

5.10 Special Permit Shield

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7.0 Unit Specific Conditions

7.1 Unit 01: Coating Operations

7.1.1 Description

Coating of tractors and components. Also, electrocoating of tractors and components.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Equipment	Date Constructed	Emission Control Equipment
Group 01: Coating Operations	Prime/Top (SS)	4/77	Dry Filter
	Touch-Up (SS)	4/77	Dry Filter
	Prime/Top (LL)	2/95	Waterwall
	Touch-Up (LL)	1986	Dry Filter
	Special Color (LL)	1982	Dry Filter
	Transmission (KK)	8/79	Waterwall
	E-Coating (prime/top)	2/95	None

7.1.3 Applicability Provisions and Applicable Regulations

a. An "affected coating operations", for the purpose of these unit specific conditions, consists of prime/top (SS), touch-up (SS), prime/top (LL), touch-up (LL), special color (LL), and transmission (KK) coatings that are applied and cured to heavy off-highway vehicle products in booths by the use of hand held spray guns. The e-coating consists of electrocoating of various components. Both fall under the category of Heavy Off-highway Vehicle Products: in the remaining counties. The affected coating operations are identified in Condition 7.1.2.

b. The affected coating operations are 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 process emission unit for which construction or modification commenced on or after April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission 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. The top coatings of the affected coating operations at the source are subject to 35 IAC 215.204(k)(2) for Heavy Off-Highway Vehicle Products: in the remaining counties, extreme performance top coat/air dried which provides that:

- i. No owner or operator of an affected coating operations shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the top coatings as applied to heavy off-highway vehicle products. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

kg/liter	lb/gallon
0.52	4.3

- ii. 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 prime coatings of the affected coating operations at the source are subject to 35 IAC 215.204(k)(2) for Heavy Off-Highway Vehicle Products: in the remaining counties, extreme performance prime coat which provides that:

- i. No owner or operator of an affected coating operations shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the prime coatings as applied to heavy off-highway vehicle products. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically

exempted from the definition of VOM) as applied at each coating applicator:

kg/liter	lb/gallon
0.42	3.5

- ii. 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
- e. The touch-up coatings of the affected coating operations at the source are subject to 35 IAC 215.204(k)(2) for Heavy Off-Highway Vehicle Products: in the remaining counties, final repair coat-air dried which provides that:

- i. No owner or operator of an affected coating operations shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the touch-up coatings as applied to heavy off-highway vehicle products. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

kg/liter	lb/gallon
0.58	4.8

- ii. 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.

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected coating operations are not subject to 35 IAC 215.301, Use of Organic Material, pursuant to 35 IAC 215.209, Exemption From General Rule on Use of Organic Material which excludes the affected coating operations from this requirements

7.1.5 Operational and Production Limits and Work Practices

- a. The Permittee shall install, operate, maintain, and replace the filters in a manner that assures compliance with the conditions of this section.
- b. An adequate inventory of spare filters shall be maintained.
- c. The Permittee shall install, operate, maintain, and replace the waterwall collector in a manner that assures compliance with the conditions of this section.
- d. Visual inspections of the water flow within the waterwall collector shall be conducted by the operator.
- e. If water flow is abnormal, actions shall be taken to restore proper operations.

7.1.6 Emission Limitations

In addition to condition 5.2.2, and the source-wide emission limitations in Condition 5.5, and 7.1.3, the affected coating operations are subject to the following:

- a. Emissions and operation of all coating operations systems combined shall not exceed the following limits:

<u>Material</u>	<u>Coating Usage (gal/yr)</u>	<u>VOM Content (lb/gal)</u>	<u>VOM Emissions (ton/yr)</u>
Prime/Top Coat	139,110	4.3	275.8
Touch-Up (Repair)	5,000	4.8	12.0

These limits are based on the allowable emission limit pursuant to 35 IAC 215.204(k)(2) at the maximum coating usage and allowable VOM content of coating materials. Compliance with annual limits shall be determined from a running total of 12 months of data. [T1]

Compliance with the annual limit shall be based on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total. [T1]

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The above limitations was established in permit 72120495, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

- b. Emissions and operation of the coating operations systems consisting of LL Main (formerly FD 12-Prime/Top coat) and LL E-Coat (formerly FD 13-Prime/Top coat) shall not exceed the following limits:

<u>Material</u>	<u>Coating Usage (gal/yr)</u>	<u>VOM Content (lb/gal)</u>	<u>VOM Emissions (ton/yr)</u>
Prime/Top Coat	21,700	4.3	31.9

These limits are based on the allowable emission limit pursuant to 35 IAC 215.204(k)(2) at eh maximum coating usage and allowable VOM content of coating materials. Compliance with annual limits shall be determined from a running total of 12 months of data. [T1]

Compliance with the annual limit shall be based 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 was established in permit 72120495, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

- c. Emissions and operation of the coating operations systems consisting of LL Special Color (formerly FD 9-Prime/Top coat) and LL Touch-Up (formerly FD 10-Repair coat) shall not exceed the following limits:

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<u>Material</u>	<u>Coating Usage (gal/yr)</u>	<u>VOM Content (lb/gal)</u>	<u>VOM Emissions (ton/yr)</u>
Prime/Top Coat	16,000	4.3	25.9
Touch-Up (Repair)	2,500	4.8	6.0

These limits are based on the allowable emission limit pursuant to 35 IAC 215.204(k)(2) at the maximum coating usage and allowable VOM content of coating materials. Compliance with annual limits shall be determined from a running total of 12 months of data. [T1]

Compliance with the annual limit shall be based 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 was established in permit 72120495, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

- d. Emissions of particulate matter from Prime/Top coatings shall not exceed 2.86 lb/hr and 3.0 ton/yr. These limits are based on the allowable emission limit pursuant to 35 Ill. Adm. Code 212.321 at the maximum process weight rate (2,493 lb/hr) and the maximum material usage (139,110 gal/yr), as indicated in the permit application. Specifically, the hourly emission rate is corrected to reflect the correct allowable emissions based upon 35 IAC 212.321. Compliance with annual limits shall be determined from a running total of 12 months of data. [T1R]

The above limitations were established in Permit 72120495 pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit

does not constitute a new major source or major modification pursuant to these rules. [T1R]

- e. Emissions of particulate matter from Touch-Up (Repair) coatings shall not exceed 0.55 lb/hr and 0.1 ton/yr. These limits are based on the allowable emission limit pursuant to 35 Ill. Adm. Code 212.321 at the maximum process weight rate (76.2 lb/hr) and the maximum material usage (5,000 gal/yr), as indicated in the permit application. Specifically, the hourly emission rate is corrected to reflect the correct allowable emissions based upon 35 IAC 212.321. Compliance with annual limits shall be determined from a running total of 12 months of data. [T1R]

The above limitations were established in Permit 72120495 pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1R]

7.1.7 Testing Requirements

Testing for VOM content of coatings and other materials shall be performed as follows [35 IAC 215.105(a), 215.211(c), and Section 39.5(7)(b) of the Act]

Upon reasonable request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used on the affected coating operations shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 215.105(a) and 215.211(a).

- a. The VOM content of representative coatings "as applied" on the affected coating operations shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 215.105(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 7.1.9(b) directly reflect the application of such material and separately account for any additions of solvent. [35 IAC 215.105(a) and 215.211(a)]

7.1.8 Inspection Requirements

None

7.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected coating operations 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 and cleaning solvents as applied on the affected spray coating operations;
 - ii. The usage of each coating and cleaning solvent in units of gallons/month;
 - iii. Density of each applied coating and cleanup solvent;
 - iv. The weight of VOM per volume of each coating, in lb/gal, (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each of the affected spray coating operations;
 - v. The weight of VOM per volume of each cleaning solvent, in units of lb/gal as applied on each of the affected spray coating operations;
 - vi. Solids content of each coating (lb/gal);
 - vii. The aggregate monthly and annual VOM emissions from the affected coating operations based on the coating, and cleaning solvent usage and VOM content, and with supporting calculations;
 - viii. If credit is desired for VOM emissions from waste materials, aggregate records of materials disposed of or recycled shall be maintained for all coatings, cleaning solvents, and any other VOM containing material use on the affected coating operations on a monthly basis; and

- b. Records of the testing of VOM and HAP content (in wt. %) of each coating and cleaning solvent as tested pursuant to the conditions of this section, which include the following [Section 39.5(7)(e) of the Act]:
 - i. Identification of material tested,
 - ii. Results of analysis;
 - iii. Documentation of analysis methodology; and
 - iv. Person performing analysis.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the control and operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

Pursuant to 35 IAC 215.211(c)(3)(A), the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.1.3(c), (d) and (e) within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected coating operations without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

Usage of coatings or cleaning solvents at this source with various VOM contents provided that the materials are tested in accordance with Condition 7.1.7, the source wide emission limitations in Condition 5.5.1 are not exceeded and the affected coating operations remains in compliance with Condition 7.1.3(c).

7.1.12 Compliance Procedures

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- a. Compliance with the particulate matter limitations in this section shall be based on the recordkeeping requirements in 7.1.9 and the formulas below:

$$\text{Emissions (lb/hr)} = \text{Paint usage (gal/hr)} \times \text{solids content (lb/gal)} \times (1 - \text{transfer efficiency}) \times (1 - \text{control efficiency})$$

Where:

$$\begin{aligned} \text{Transfer efficiency} &= 100 \% \text{ (per Title V application)} \\ \text{Control Efficiency} &= 99 \% \text{ (per Title V application)} \end{aligned}$$

- b. i. Compliance of each coating with the VOM emission limitations in Condition 7.1.3(c) shall be based on the recordkeeping requirements in Condition 7.1.9 and by the use of either testing as required in Condition 7.1.7 or by use of the formulae listed below:

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

Where:

$$V = \text{Percent VOM in the coating (\%)}$$

$$D = \text{Overall coating density (lb/gal)}$$

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

Where:

$$w_i = \text{Percent exempt compound } i \text{ in the coating,}$$

$$d_i = \text{Overall density of exempt compound } i, \text{ in lb/gal}$$

and the summation \sum is applied over water and all exempt compounds i , in the coating.

$$\text{Cleaning Solvent VOM Content} = V_s \times D_s$$

Where:

$$V_s = \text{Percent VOM in the solvent (\%)}$$

$$D_s = \text{Overall solvent density (lb/gal)}$$

Total VOM Content = Coating VOM Content +
Cleaning Solvent VOM Content - Cleaning
Solvent VOM Content recycled

- ii. Compliance of affected coating operations with the VOM emission limitations in Condition 5.5.1 and 7.1.6 shall be based on the recordkeeping requirements in Condition 7.1.9 and by the use of either testing as required in Condition 7.1.7 or by use of the formulae listed below:

Coating VOM Emissions = $V \times D \times U$

Where:

V = Percent VOM in the coating (%)

D = Overall coating density (lb/gal)

U = Overall coating usage (gal/mo and gal/yr)

Cleaning Solvent VOM Emissions = $V_1 \times D_1 \times U_1$

Where:

V_1 = Percent VOM in the cleaning solvent (%)

D_1 = Overall cleaning solvent density (lb/gal)

U_1 = Overall cleaning solvent usage (gal/mo
and gal/yr)

Total VOM Emissions = Coating VOM Emissions +
Cleaning Solvent VOM Emissions - Cleaning
Solvent VOM Emissions from recycled

7.2 Unit 02: Paint Pigment Reclamation System
 Control: Dust Collectors (3), Filter Boxes (2)

7.2.1 Description

Reclamation of used paints for reformulation from waterwall collector at spray coating operations.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 02	Paint Pigment Reclamation System	6/95	3 Dust Collectors, 2 Filter Boxes

7.2.3 Applicability Provisions and Applicable Regulations

- a. The "affected pigment reclamation system" for the purpose of these unit-specific conditions, is the unit described in 7.2.1 and 7.2.2.
- b. The affected pigment reclamation system 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 process emission unit for which construction or modification commenced on or after April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321. (See also Attachment 1) [35 IAC 212.321(a)]

7.2.4 Non-Applicability of Regulations of Concern

N/A

7.2.5 Operational and Production Limits and Work Practices

The Permittee shall install, operate, maintain, and replace the dust collectors and filter boxes in a manner that assures compliance with the conditions of this section.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected pigment reclamation system is subject to the following:

Particulate matter emissions and operation of paint reclamation system shall not exceed the following limits:

	Operating Hours <u>(Hr/Yr)</u>	Emissions <u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
Paint Reclamation System	4,000	6.0	12.0

These limits are based on the hourly emission limits calculated from throughput, control efficiency of dust collector and filter box, and maximum operating hours (4,000 hr/yr). Compliance with annual limits shall be determined from the running total of 12 months of data. [T1]

The above limitations was established in permit 99070005, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

7.2.7 Testing Requirements

None

7.2.8 Inspection Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected pigment reclamation system to demonstrate compliance with 5.5.1, 7.2.3(b), and 7.2.6 pursuant to Section 39.5(7)(b) of the Act:

- a. Operating records of material throughput on a monthly basis in tons.
- b. A maintenance log for the control equipment detailing all routine and nonroutine maintenance performed.

7.2.10 Reporting Requirements

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

Emissions of PM from the affected pigment reclamation system in excess of the limits specified in conditions 5.5.1 and 7.2.6 within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

Compliance with particulate emission limits of this section is assured and achieved by the operation of control devices and their control efficiencies, and proper operation, maintenance, and work practices inherent in operation of the affected pigment reclamation system.

7.3 Unit 03: Solvent Still
 Control: None

7.3.1 Description

Distillation to recover spent solvent. Emissions from the solvent still consist of VOM emissions and Methyl Isobutyl Ketone (MIBK) (CAS # 108101).

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 03	Solvent Still	4/97	None

7.3.3 Applicability Provisions and Applicable Regulations

- a. The "affected solvent still" for the purpose of these unit-specific conditions, is the unit described in conditions 7.3.1 and 7.3.2.
- b. The affected solvent still is subject to 35 IAC 215.301 which states that no person shall cause or allow the discharge of more than 3.6 kg (8 lb/hr) of organic material into the atmosphere from any emission source, except as provided in Sections 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material. [35 IAC 215.301]

7.3.4 Non-Applicability of Regulations of Concern

N/A

7.3.5 Operational and production Limits and Work Practices

None

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected solvent still is subject to the following:

This permit is issued based negligible emissions of volatile organic material (VOM) from the affected solvent still. For this purpose, emissions shall not

exceed nominal emission rates of 0.1 lb/hr and 0.44 tons/year. [T1]

The above limitations was established in permit 97020096, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

7.3.7 Testing Requirements

None

7.3.8 Inspection 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 solvent still to demonstrate compliance with conditions 5.5.1, 7.3.3(b), and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Spent solvent entering still (gallon/batch)
- b. Reclaimed solvent exiting still (gallon/batch)
- c. Still bottoms (gallon/batch)
- d. Lost solvent (gallon/batch and pound/hour)
- e. Still operating time (hours/year)
- f. Solvent name, VOM content, and density.

7.3.10 Reporting Requirements

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

Emissions of VOM from the affected solvent still excess of the limits specified in Conditions 5.5.1 and 7.3.6 within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

Compliance with the emission limits in Conditions 5.5.1, 7.3.3, and 7.3.6 shall be based on the recordkeeping requirements in Condition 7.3.9 and by the following formula as provided in the Title V application:

VOM emissions (lb/hr) = (Throughput, gal/hr) X (0.00548 lb VOM emitted/gallon)*

* as provided in the Title V application

7.4 Unit 04: Gasoline Storage Tank
 Control: Permanent Submerged Loading Pipe

7.4.1 Description

A 4,750 gallon tank with open vent used to store yellow top coat (spray coating).

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Construction Date	Emission Control Equipment
Unit 04	4,750 Gallon Paint storage Tank	1975	Permanent Submerged Loading Pipe

7.4.3 Applicability Provisions and Applicable Regulations

- a. The "affected paint storage tank", for the purpose of these unit specific conditions, is the tank described in conditions 7.4.1 and 7.4.2.
- b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, and further processed consistent with Section 218.108 of this Part, or unless such tank is a pressure tank as described in 35 IAC 218.121(a) or is fitted with a recovery system as described in 35 IAC 218.122(b)(2) [35 IAC 218.122(b)].
- 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 215.302, 215.303, or 215.304 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 215.301].

7.4.4 Non-Applicability of Regulations of Concern

- a. The affected tank is not subject to the NSPS for volatile organic liquid storage vessels (including

petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984, 40 CFR 60 Subpart Kb, because the affected tank was constructed prior to 1984.

7.4.5 Operational and Production Limits and Work Practices

The affected tank shall only be used for the storage of paints.

7.4.6 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.

Emission limits for VOM are not set for the affected tank, 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 the federal rules for the Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tank to demonstrate compliance with Conditions 5.5.1, 7.4.3, and 7.4.5, pursuant to Section 39.5(7)(b) of the Act:

- a. Design information for the tank showing the presence of a permanent submerged loading pipe;
- 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 tank, gal/mo and gal/yr; and

- d. The monthly and aggregate annual VOM emissions from the affected tank 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 deviations of the affected 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 storage of VOL in an affected tank that is not in compliance with the requirements of Conditions 7.4.3(b) (see also 35 IAC 215.122(b)), e.g., no "permanent submerged loading pipe," within thirty days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;
- b. Any storage of VOL in an affected tank that is out of compliance with the requirements of Conditions 7.4.3(b) (see also 35 IAC 215.122(b)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance;
- c. The storage of any VOL or VPL other than the material specified in Condition 7.4.5 within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

Compliance with the emission limits 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 tanks to determine compliance with Conditions 5.5.1 and 7.4.3(c), Versions 3.1 or 4.0 of the TANKS program are acceptable.

7.5 Unit 05 Fuel Combustion Units - natural gas-fired boilers, each with a maximum design heat input capacity of 100 MBtu/hr or less, but greater than or equal to 10 MBtu/hr and constructed, modified or reconstructed after June 9, 1989.

7.5.1 Description

Natural gas fired boilers are used to produce steam for heat generation at the source.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 05	Natural Gas Fired Boilers:		
	Boiler 23 - 90 MBtu/hr	1990	None
	Boiler 11 (FD 6) - 25.1 MBtu/hr	8/97	None
	Boiler 12 (FD-7) - 25.1 MBtu/hr	8/97	None
	Boiler 5 - 31.4 MBtu/hr	8/98	None
	Boiler 6 - 31.4 MBtu/hr	8/98	None
	Boiler 7 - 31.4 MBtu/hr	8/98	None
	Boiler 8 - 37.7 MBtu/hr	8/98	None
	Boiler 9 - 37.7 MBtu/hr	8/98	None
	Boiler KK - 12.5 MBtu/hr	8/98	None

7.5.3 Applicable Provisions and Regulations

- a. An "affected boiler" for the purpose of these unit specific conditions, is a hot water generating unit that is fired with natural gas, with a maximum heat input capacity of 100 MBtu/hr or less, but greater than or equal to 10 MBtu/hr, and constructed, modified or reconstructed after June 9, 1989. As a consequence, the affected boilers are subject to the Standards of Performance for Small Industrial-

Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc because the boilers were constructed after June 9, 1989 and the firing rates of the affected boilers are less than 100 MBtu/hr and greater than 10 MBtu/hr. The affected boilers are identified in Condition 7.5.1 and 7.5.2.

- b. The emission of carbon monoxide (CO) into the atmosphere from any affected boiler with actual heat input greater than 2.9 MW (10 MBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air. [35 IAC 216.121]
- c. Each affected boiler is also subject to the opacity limits identified in Condition 5.2.2(b).

7.5.4 Non-Applicability of Regulations of Concern

- a. Each affected boiler is not subject to 35 IAC 217.141, because the actual heat input of the affected boiler is less than 73.2 MW (250 MBtu/hr).
- b. Pursuant to 35 IAC 215.303, each affected boiler, i.e., fuel combustion emission unit, is not subject to 35 IAC 215.301, Use of Organic Material.
- c. There are no applicable requirements for particulate matter or sulfur dioxide for affected boilers firing natural gas.

7.5.5 Operational and Production Limits and Work Practices

- a. Each affected boiler shall only be fired by natural gas.

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the boilers are subject to the following:

- a. Emissions and operation of natural gas fired boilers 11 (FD-6) and 12 (FD-7) shall not exceed the following limits:

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E M I S S I O N S

<u>Item of Equipment</u>	<u>Maximum Firing Rate (MBtu/hr)</u>	<u>Fuel Usage (mmscf/yr)</u>	<u>NO_x</u>		<u>CO</u>	
			<u>(lb/hr)</u>	<u>(T/yr)</u>	<u>(lb/hr)</u>	<u>(T/yr)</u>
Boiler 11	25.1	219.88	3.51	15.39	4.14*	18.11*
Boiler 12	25.1	219.88	3.51	15.39	4.14*	18.11*

* Boilers 11 and 12 which were covered by contemporaneous construction permits, shall comply with the above for emissions of carbon monoxide established in permit 98050022. These CO limits supersede the previous limits, and are established to address a change in USEPA=s emission factors for carbon monoxide (84 lb/10⁶ scf). The above CO limitations were established in permit 98050022, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

These emissions are based on standard AP-42 emission factors, maximum firing rate, maximum annual fuel usage, and 8760 hr/yr operation. Compliance with annual limits shall be determined from a running total of 12 months of data. [T1]

The above NO_x and fuel usage limitations was established in permit 97060097, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

- b. Emissions of boiler 23 shall not exceed the following limits:

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<u>NO_x Emissions</u>			<u>CO Emissions</u>		
<u>(Lb/MBtu)</u>	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>	<u>(Lb/MBtu)</u>	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>
0.14	12.6	35.0	0.14	12.6	35.0

These limits are based on the maximum firing rate stated in the application.

Annual natural gas consumption from boiler 23 shall not exceed 500 million cubic feet. [T1]

The firing rate of boiler 23 shall not exceed 90 MBtu/hr. [T1]

Compliance with annual limits shall be determined from a running total of 12 months of data. [T1]

The above limitations was established in permit 98040094, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

- c. i. Emissions of nitrogen oxide (NO_x) and carbon monoxide (CO) from the heating system consisting of boilers KK, 5, 6, 7, 8, and 9 shall not exceed the following limits:

<u>Pollutant</u>	<u>E M I S S I O N S</u>	
	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
NO _x	6.55	78.25
CO	5.50	65.73

These limits are based upon the maximum total natural gas usage as indicated above and standard AP-42 emission factors. [T1]

Unless specific emission factors are developed for the heating system from emission testing approved by the Illinois EPA compliance with these limits shall be determined using the following USEPA emission factors for natural gas combustion: 100 lb NO_x/million ft³, 84 lb

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CO/million ft³ and the following conversion factors: 1,020 Btu/ft³. [T1]

Total heat design input capacity of the heating system (six boilers total) shall not exceed 182.1 MBtu/hr (per permit 98050022). [T1]

Total fuel usage by the heating system shall not exceed 131 million ft³/month and 1,565 million ft³/year (per permit 98050022). [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data from the previous month plus the preceding 11 months (i.e., a 12 month running total) (per permit 98050022). [T1]

The above limitations was established in permit 98050022, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

Permit 98050022 was issued based upon a contemporaneous and creditable decrease in emissions from the shutdown of the existing coal fired boilers at the plant so that the new heating system does not represent a significant net increase in emissions (and in fact, substantially lower emissions). Therefore, the system is not subject to the rules for the Prevention of Significant Deterioration of Air Quality, 40 CFR 52.21. The change in emissions is described in Tables 1, 2, and 3 located within Attachment 2. [T1]

- ii. Other combustion equipment installed in conjunction with conversion from coal to gas, including door heaters, roof top heating units, small boilers, and miscellaneous heaters, as described in this application, shall comply with the following requirements:

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- A. Natural gas or other gaseous fuel shall be the only fuels burned in this equipment.
- B. The heat input capacity of each item of other combustion equipment shall not exceed 10 MBtu\hr, so as to qualify for exemption from state permits under 35 IAC 201.146(c)]
- C. Total heat input capacity of the other combustion equipment shall not exceed 365 MBtu/hr.
- D. Total fuel usage by the heating system and other fuel combustion emission units, as described in the above referenced application, at the source shall not exceed 266 million ft³/month and 3,135 million ft³/year.
- E. Total emissions of NO_x and CO from heating system and other combustion equipment combined as described in the above referenced application shall not exceed the following limits:

<u>Pollutant</u>	E M I S S I O N S	
	<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
NO _x	13.30	156.80
CO	11.17	131.70

These limits are based upon the maximum total natural gas usage as indicated above and standard AP-42 emission factors.

The above limitations (c(2)A-E) were established in permit 98050022, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit do not constitute a

new major source or major modification pursuant to these rules. [T1]

Permit 98050022 was issued based upon a contemporaneous and creditable decrease in emissions from the shutdown of the existing coal fired boilers at the plant so that the new heating system does not represent a significant net increase in emissions (and in fact, substantially lower emissions). Therefore, the system is not subject to the rules for the Prevention of Significant Deterioration of Air Quality, 40 CFR 52.21. The change in emissions is described in Tables 1, 2, and 3 within Attachment 2. [T1]

7.5.7 Testing Requirements

None

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items to demonstrate compliance with Conditions 5.5.1, 5.5.3 and 7.5.5 pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas usage for affected boilers (ft³/day); [40 CFR 60.48c(g)]
- b. Annual aggregate NO_x, PM, SO₂, CO, and VOM emissions from the boilers, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with applicable control and operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. Notification within 60 days of operation of the boilers that may not have been in compliance with the

opacity limitations in Condition 5.5.2(b), with a copy of such record for each incident.

- b. Emissions of NO_x, PM, SO₂, CO, or VOM from the boilers in excess of the limits specified in Condition 5.5.1 and 7.5.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

- a. Compliance with the emission limits in Conditions 5.5.1 and 7.15.6 shall be based on the recordkeeping requirements in Condition 7.15.9 and the emission factors and formulas listed below:
 - i. Emissions from the fuel combustion units burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (lb/Mft³)</u>
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5
CO	84

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (< 100 MBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Fuel Combustion Unit Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

- b. Compliance with Condition 7.5.3(c) is demonstrated under inherent operating conditions of an affected boiler, so that no compliance procedures are set in this permit addressing this requirement.

7.6 Unit 06: Diesel Generators
 Control: None

7.6.1 Description

Diesel generators used for electricity production.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 06	Diesel Generators:		None
	CC3 W2 - Rated Output 1939 kW, 2598 hp	12/94	None
	HH - Rated Output 1350 kw, 1809 hp	9/90	None
	AD 6 - Rated Output 1468 kW, 1967 hp	1984	None
	AD 7 - Rated Output 1468 kW, 1967 hp	1984	None
	AD 8 - Rated Output 1903 kW, 2550 hp	1988	None

7.6.3 Applicability Provisions and Applicable Regulations

- a. The "affected generators" for the purpose of these unit-specific conditions, are the units described in 7.6.1 and 7.6.2.
- 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 any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].

7.6.4 Non-Applicability of Regulations of Concern

This permit is issued based on affected engines not being subject to the requirements of 35 IAC 212.321 or 212.322 because due to the unique nature of these units, a process weight rate weight cannot be set so that 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 affected generators are subject to the following:

Emissions and operation of the diesel generators shall not exceed the following limits:

Generator	Operating Hours (Hr/Yr)	E M I S S I O N S			
		NO _x (Lb/Hr)	NO _x (T/Yr)	CO (Lb/Hr)	CO (T/Yr)
CC3W2	500	62.35	15.59	14.28	3.57
HH	500	43.42	10.85	9.95	2.49
AD6	500	47.21	11.81	10.82	2.70
AD7	500	47.21	11.81	10.82	2.70
AD8	500	61.20	15.30	14.02	3.50
		Total	65.00		15.00

These limits are based on manufacturers guaranteed emission rates, maximum operating hours, and size of generators. Compliance with annual limit shall be determined from a running total of 12 months of data.
 [T1N]

The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the CO and NO_x emissions from the affected generators below the levels that would trigger the applicability of these

rules, consistent with the information provided in the CAAPP application [T1N].

7.6.7 Operating Requirements

Fuel oil #2 shall be the only fuel fired in the affected diesel generators.

7.6.8 Monitoring 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 affected generator to demonstrate compliance with conditions 5.5.1, and 7.6.6 pursuant to Section 39.5(7)(b) of the Act:

- a. Operating hours of each generator
- b. NO_x and CO emissions based on hours of operation and the applicable emission factors, with supporting calculations.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with applicable control and operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. Notification within 60 days of operation of the generators that may not have been in compliance with the opacity limitations in Condition 5.5.2(b), with a copy of such record for each incident.
- b. Emissions of NO_x and CO from the generators in excess of the limits specified in Condition 5.5.1 and 7.6.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

Compliance with the source-wide emission limits specified in Condition 5.5 and 7.6.6 shall be based on the records required by Condition 5.6 and the use of USEPA emissions estimating guidance, i.e., AP-42 3.4-1 and 3.4-2.

<u>Pollutant</u>	<u>Emission Factors</u> <u>(Lb/Hp-hr)</u>
PM	0.0007
NO _x	0.0240
SO ₂	0.0003
VOM	0.0007
CO	0.0055

Generator Emissions (lb) = rated power output in Hp X appropriate emission factor

Generator Emissions (Tons) = [Emissions (lb) X operating hours]/2000

The heat content of distillate fuel oil shall be assumed to be 137,000 Btu/gal, per supplier data.

7.7 Unit 07: Gasoline Underground Storage Tanks
 Control: Permanent Submerged Loading Pipes

7.7.1 Description

Three underground storage tanks at 12,000 gallon each for a total of 36,000 gallons.

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 07	Three underground Gasoline Tanks (12,000 gallons each)	6/85	Permanent Submerged Loading Pipes

7.7.3 Applicability Provisions and Applicable Regulations

- a. The "affected tanks" for the purpose of these unit specific conditions, are the tanks described in conditions 7.7.1 and 7.7.2
- b. The affected tanks are subject to the NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb, because the affected tanks have a capacity greater than or equal to 40 m³ and is used to store VOL's for which construction, reconstruction, or modification is commenced after July 23, 1984.
- c. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, or unless such tank is a pressure tank as described in Section 215.121(a) or is fitted with a recovery system as described in Section 215.121(b)(2). [35 IAC 215.122(b)]
- d. The affected tank is subject to 35 IAC 215.583(a), which provides no person shall cause or allow the transfer of gasoline from any delivery vessel into

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any stationary storage tank at a gasoline dispensing operation unless:

- i. The tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)]; and
 - ii. The vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:
 - A. A vapor collection system that meets the requirements of Condition 7.7.5(c) (see also 35 IAC 215.583(d)(4)) [35 IAC 215.583(a)(2)(A)]; or
 - B. A refrigeration-condensation system or any other system approved by the Illinois EPA and approved by the USEPA as a SIP revision, that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled [35 IAC 215.583(a)(2)(B)]; and
 - C. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 IAC 215.584(b) or (d) [35 IAC 215.583(a)(2)(C)]; and
 - iii. All tank vent pipes are equipped with pressure/vacuum relief valves with the pressure/vacuum relief valve shall be set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column [35 IAC 215.583(a)(3)].
- e. The affected tank is subject to 35 IAC 215.585, which provides that:
- i. No person shall sell, offer for sale, dispense, supply, offer for supply, or transport for use in Illinois gasoline whose Reid vapor pressure exceeds the applicable limitations set forth in Conditions 7.7.3(e)(ii) and (e)(iii) (see also 35 IAC 215.585(b) and (c)) during the regulatory control periods, which shall be May 1 to

September 15 for retail outlets, wholesale purchaser-consumer, operations, and all other operations [35 IAC 215.585(a)].

- ii. The Reid vapor pressure of gasoline, a measure of its volatility, shall not exceed 9.0 psi (62.07 kPa) during the regulatory control period in 1990 and each year thereafter [35 IAC 215.585(b)].
- iii. The Reid vapor pressure of ethanol blend gasolines shall not exceed the limitations for gasoline set forth in Condition 7.7.3(e)(ii) (see also 35 IAC 215.585(b)) by more than 1.0 psi (6.9 kPa). Notwithstanding this limitation, blenders of ethanol blend gasolines whose Reid vapor pressure is less than 1.0 psi above the base stock gasoline immediately after blending with ethanol are prohibited from adding butane or any product that will increase the Reid vapor pressure of the blended gasoline [35 IAC 215.585(c)].

7.7.4 Non-Applicability of Regulations of Concern

- a. Except as provided in Condition 7.7.9(b) (see also 40 CFR 60.116b) storage vessels with design capacity less than 75 m³ are exempt from the General Provisions of the NSPS and from the provisions of 40 CFR 60 Subpart Kb [40 CFR 60.110b(b)].
- b. The affected tanks are not subject to the limitations of 35 IAC 215.120, Control Requirements for Storage Containers of VOL, pursuant to 35 IAC 215.119, because the affected tank is used to store a petroleum liquid and the capacity is less than 151 m³ (40,000 gal).
- c. The affected tanks are not subject to the requirements of 35 IAC 215.123, Storage Containers of VPL, pursuant to 35 IAC 215.123(a)(2), which exempts storage tanks with a capacity less than 151.42 m³ (40,000 gal).

7.7.5 Operational and Production Limits and Work Practices

- a. The affected tank shall only be used for the storage of gasoline.

- b. Pursuant to 35 IAC 215.583(c), each owner of a gasoline dispensing operation shall:
 - i. Install all control systems and make all process modifications required by Condition 7.7.3(c) (see also 35 IAC 215.583(a)) [35 IAC 215.583(c)(1)];
 - ii. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system [35 IAC 215.583(c)(2)]; and
 - iii. Repair, replace or modify any worn out or malfunctioning component or element of design [35 IAC 215.583(c)(3)].

- c. Pursuant to 35 IAC 215.583(d), each operator of a gasoline dispensing operation shall:
 - i. Maintain and operate each vapor control system in accordance with the owner's instructions [35 IAC 215.583(d)(1)];
 - ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system [35 IAC 215.583(d)(2)];
 - iii. Maintain gauges, meters or other specified testing devices in proper working order [35 IAC 215.583(d)(3)]; and
 - iv. Operate the vapor collection system and delivery vessel unloading points in a manner that prevents:
 - A. A reading equal to or greater than 100 percent of the LEL (measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B [35 IAC 215.583(d)(4)(A)]; and

- B. Avoidable leaks of liquid during the filling of storage tanks [35 IAC 215.583(d)(4)(B)].

7.7.6 Emission Limitations

This permit is issued based on negligible emissions of volatile organic material from the affected tanks. For this purpose emissions from each affected tank shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr. [T1]

The above limitations was established in permit 99070005, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

7.7.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the Reid vapor pressure of gasoline and the ethanol content of ethanol blend gasolines shall be determined according to the methods specified below:
 - i. Pursuant to 35 IAC 218.585(d), all sampling of gasoline required pursuant to the provisions of Conditions 7.7.7(c)(ii) and (c)(iii) (see also 35 IAC 215.585(e) and (f)) shall be conducted by one or more of the following approved methods or procedures:
 - A. For manual sampling, ASTM D4057 [35 IAC 215.585(d)(1)];
 - B. For automatic sampling, ASTM D4177 [35 IAC 215.585(d)(2)]; or
 - C. Sampling procedures for Fuel Volatility, 40 CFR 80 Appendix D [35 IAC 215.585(d)(3)].
 - ii. The Reid vapor pressure of gasoline shall be measured in accordance with either test method

ASTM D323 or a modification of ASTM D323 known as the "dry method" as set forth in 40 CFR 80, Appendix E. For gasoline - oxygenate blends which contain water-extractable oxygenates, the Reid vapor pressure shall be measured using the dry method test [35 IAC 215.585(e)].

- iii. The ethanol content of ethanol blend gasolines shall be determined by use of one of the approved testing methodologies specified in 40 CFR 80, Appendix F [35 IAC 215.585(f)].

7.7.8 Monitoring Requirements

None

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tanks to demonstrate compliance with Conditions 5.5.1 and 7.7.3 pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of the affected tank pursuant to Condition 7.7.7, which include the following [Section 39.5(7)(e) of the Act]:
 - i. The date, place and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;
 - iv. The analytical techniques or methods used;
 - v. The results of such analyses; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
- b. The owner or operator of each storage vessel for which construction, reconstruction, or modification is commenced after July 23, 1984 with a design capacity greater than or equal to 40 m³, but less than 75 m³ shall keep readily accessible records

showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 m³ is subject to no other provision of 40 CFR 60 Subpart Kb other than those required by this paragraph. This record shall be kept for the life of the source [40 CFR 60.110b(a), 60.116b(a), and 60.116b(b)].

- c. Design information for the tank showing the presence of a permanent submerged loading pipe;
- d. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- e. The throughput of the affected tanks, gal/mo and gal/yr; and
- f. The annual VOM emissions from the affected tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected 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 storage of VOL in an affected tank that is not in compliance with the requirements of Conditions 7.7.3(c) and (d)(i) (see also 35 IAC 215.122(b) and 215.583(a)(1)), e.g., no "permanent submerged loading pipe," within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;
- b. Any storage of VOL in an affected tank that is out of compliance with the requirements of Conditions 7.7.3(c) and (d)(i) (see also 35 IAC 215.122(b) and 215.583(a)(1)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of

becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance;

- c. The storage of any VOL or VPL other than the material specified in Condition 7.7.5(a) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.7.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from each affected tank, the version 3.1 of the TANKS program is acceptable.

7.8 Unit 08: Gasoline Storage Tank
 Control: Submerged Pipe Loading

7.8.1 Description

One above ground gasoline storage tank (15,000 gal) used to store gasoline.

7.8.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
UNIT 08	Gasoline Storage Tank (15,000 Gallon Capacity)	1975	Submerged Pipe Loading

7.8.3 Applicability Provisions and Applicable Regulations

- a. The Gasoline Tank is an "affected tank" for the purpose of these unit-specific conditions. The tank is identified in conditions 7.8.1 and 7.8.2.
- b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2) [35 IAC 215.122(b)].
- 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 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].
- d. Pursuant to 35 IAC 215.583(a), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing operation unless:

- i. The tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)]; and
- ii. Pursuant to 35 IAC 215.583(a)(2), the vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:
 - A. A vapor collection system that meets the requirements of Condition 7.8.5(c) (see also 35 IAC 215.583(d)(4)) [35 IAC 215.583(a)(2)(A)]; or
 - B. A refrigeration-condensation system or any other system approved by the Illinois EPA that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled [35 IAC 215.583(a)(2)(B)]; and
 - C. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 IAC 215.584(b) or (d) [35 IAC 215.583(a)(2)(C)].

7.8.4 Non-Applicability of Regulations of Concern

- a. The affected tank is not subject to the NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb, because the affected tank was constructed prior to 1984.
- b. The affected tank is not subject to the requirements of 35 IAC 215.123, Petroleum Liquid Storage Tanks, pursuant to 35 IAC 215.123(a)(2), which exempts storage tanks with a capacity less than 151.42 m³.

7.8.5 Operational and Production Limits and Work Practices

- a. The affected tank shall only be used for the storage of gasoline.
- b. Pursuant to 35 IAC 215.583(c), each owner of a gasoline dispensing operation shall:

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- i. Install all control systems and make all process modifications required by Condition 7.8.3(d) (see also 35 IAC 215.583(a)) [35 IAC 215.583(c)(1)];
 - ii. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system [35 IAC 215.583(c)(2)]; and
 - iii. Repair, replace or modify any worn out or malfunctioning component or element of design [35 IAC 215.583(c)(3)].
- c. Pursuant to 35 IAC 215.583(d), each operator of a gasoline dispensing operation shall:
- i. Maintain and operate each vapor control system in accordance with the owner's instructions [35 IAC 215.583(d)(1)];
 - ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system [35 IAC 215.583(d)(2)];
 - iii. Maintain gauges, meters or other specified testing devices in proper working order [35 IAC 215.583(d)(3)]; and
 - iv. Pursuant to 35 IAC 215.583(d)(4), operate the vapor collection system and delivery vessel unloading points in a manner that prevents:
 - A. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B [35 IAC 215.583(d)(4)(A)]; and
 - B. Avoidable leaks of liquid during the filling of storage tanks [35 IAC 215.583(d)(4)(B)].

7.8.6 Emission Limitations

This permit is issued based on negligible emissions of volatile organic material from the affected tanks. For this purpose emissions from each affected tank shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 tons/yr. [T1]

The above limitations was established in permit 99070005, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

7.8.7 Testing Requirements

Within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds the limits of Condition 7.8.5(c)(iv)(A) (see also 35 IAC 215.583(d)(4)(A)) [35 IAC 215.583(d)(5)].

7.8.8 Monitoring Requirements

None

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tank to demonstrate compliance with Conditions 5.5.1, 7.8.3, and 7.8.5, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of the affected tank pursuant to Condition 7.8.7, which include the following [Section 39.5(7)(e) of the Act]:
 - i. The date, place and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;

- iv. The analytical techniques or methods used;
 - v. The results of such analyses; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
- b. Design information for the tank showing the presence of a permanent submerged loading pipe;
 - c. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
 - d. The throughput of the affected tank, gal/mo and gal/yr; and
 - e. The monthly and aggregate annual VOM emissions from the affected tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.8.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected 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 storage of VOL in an affected tank that is not in compliance with the requirements of Conditions 7.8.3(b) and (d)(i) (see also 35 IAC 215.122(b) and 215.583(a)(1)), e.g., no "permanent submerged loading pipe," within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;
- b. Any storage of VOL in an affected tank that is out of compliance with the requirements of Conditions 7.8.3(b) and (d)(i) (see also 35 IAC 215.122(b) and 215.583(a)(1)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the non-compliance status. This

notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance;

- c. The storage of any VOL or VPL other than the material specified in Condition 7.8.5(a) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.8.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected tanks to determine compliance with Conditions 5.5.1 and 7.8.3(c), Versions 3.1 or 4.0 of the TANKS program are acceptable.

7.9 Unit 09: Soil Vapor Extraction System
 Control: Vapor Phase Activated Carbon Absorbers

7.9.1 Description

The soil vapor extraction system pulls air from soil into perforated PVC piping to extract VOM, which is passed through an air/liquid separator and then piped to the 2 in series Vapor Phase Activated Carbon (VPAC) Absorbers.

7.9.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 09	Soil Vapor Extraction System	August 1991	Vapor Phase Activated Carbon Adsorbers

7.9.3 Applicability Provisions and Applicable Regulations

- a. The "affected vapor extraction system" for the purpose of these unit-specific conditions, is the system identified in conditions 7.9.1 and 7.9.2.
- 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 any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].

7.9.4 Non-Applicability of Regulations of Concern

N/A

7.9.5 Operational and Production Limits and Work Practices

The Permittee shall properly install and operate the affected vapor extraction system per manufacturer specifications.

7.9.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected vapor extraction system is subject to the following:

Emissions of organic material from affected vapor extraction system shall not exceed 1.68 tons/yr. [T1]

This limit is based upon the maximum soil concentration (550 mg/kg), maximum amount of soils to be treated (61.1 million pounds) the maximum hours of operation (8736 hr/yr), and the maximum carbon canister control efficiency (90 %) as provided in the application. [T1]

The above limitations was established in permit 91070001, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

7.9.7 Testing Requirements

The Permittee shall conduct ongoing field testing of the extracted vapor for organic chlorine with a Drager tube to determine when the filter media must be replaced.

7.9.8 Monitoring Requirements

None

7.9.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected vapor extraction system to demonstrate compliance with Conditions 5.5.1 and 7.9.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of field tests of extracted vapor;
- b. Hours of operation of the affected vapor extraction system; and
- c. Volume of soil remediated per year

7.9.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected vapor extraction system with the permit requirements as follows,

pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of VOM from the affected vapor extraction system in excess of the limits specified in condition 7.9.6 within 30 days of such an occurrence.

7.9.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.9.12 Compliance Procedures

Compliance of the affected vapor extraction system with conditions 7.9.3(b) and 7.9.6 shall be determined by the recordkeeping requirements of 7.9.9 and by the following formula:

VOM emission from vapor extraction system = (Emission rate from blower, lb/hr) X (1 - (control efficiency of adsorber* ÷ 100))

Where:

VOM emission rate from blower, lb/hr = (total wt. Of PCE in soil, lb) ÷ volume of soil to be remediated, ft³) X (flow rate, cfm) X (60 min/hr)

* 90 % as indicated in Title V application

7.10 Unit 10: Groundwater Treatment System
 Control: Vapor Phase Activated Carbon Absorbers

7.10.1 Description

Groundwater is pumped from three extraction wells and one wet well to the Groundwater Treatment System wherein air is sparged through the groundwater to extract VOM, which is then passed through an air dryer and then piped to the vapor phase activated carbon adsorbers.

7.10.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 10	Aeration Tanks 1 and 2, Air Stripper	April 1997	Vapor Phase Activated Carbon Adsorber

7.10.3 Applicability Provisions and Applicable Regulations

- a. The "affected groundwater treatment system " for the purpose of these unit-specific conditions, is the unit described in conditions 7.10.1 and 7.10.2.
- 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 any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].

7.10.4 Non-Applicability of Regulations of Concern

N/A

7.10.5 Operational and Production Limits and Work Practices

None

7.10.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected groundwater treatment system is subject to the following:

Emissions of Volatile Organic Material (VOM) from the affected groundwater treatment system shall not exceed 0.3 pounds per hour and 1.2 tons per year. [T1]

These limits are based on maximum emission rates. 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 was established in permit 97030077, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

7.10.7 Testing Requirements

The Permittee shall conduct ongoing field testing of the extracted vapor for organic chlorine with a Drager tube to determine when the filter media must be replaced

7.10.8 Monitoring Requirements

None

7.10.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected groundwater treatment system to demonstrate compliance with Conditions 5.5.1, 7.10.3 and 7.10.6, pursuant to Section 39.5(7)(b) of the Act:

- a. The groundwater pumping rate (gpm)
- b. Concentration of the contaminant in the groundwater (mg/l)

7.10.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected groundwater treatment system with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act.

Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of VOM from the affected groundwater treatment system in excess of the limits specified in condition 7.10.6 within 30 days of such an occurrence.

7.10.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.10.12 Compliance Procedures

Compliance of the affected groundwater treatment system with Conditions 5.5.1, 7.10.3(b), and 7.10.6 shall be based on the recordkeeping requirements in 7.10.9 and the following emission factors and formula as provided in the title V application:

$$ER = Q \times C \times RE \times 5.042E-4$$

Where:

ER = emission rate (lb/hr)

Q = groundwater pumping rate (gpm)

C = concentration of the contaminant in the groundwater (mg/L)

RE = The removal efficiency

5.024e-4 = a constant having units of (lb liter min)/mg gal hr

7.11 Unit 11: Fugitive Emissions

7.11.1 Description

Moving vehicles create particulate matter (road dust) emissions on 4.21 miles of paved roadways.

7.11.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Control
Unit 11	Fugitive Emissions from Paved Roads	---	---

7.11.3 Applicability Provisions and Applicable Regulations

Refer to the source-wide conditions in Section 5 which address opacity requirements.

7.11.4 Non-Applicability of Regulations of Concern

N/A

7.11.5 Control Requirements

None

7.11.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, Unit 11 is subject to the following:

None

7.11.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act and 35 IAC 212.107, for both fugitive and non-fugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This test method shall be used to determine compliance with 35 IAC 212.123 [35 IAC 212.107].

- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged. This test method shall be used to determine compliance with 35 IAC 212.301 [35 IAC 212.109].

7.11.8 Inspection Requirements

N/A

7.11.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items to demonstrate compliance with Conditions 5.5.1 and this section pursuant to Section 39.5(7)(b) of the Act:

For Paved Roads:

- a. E = Particulate emission factor (lb/VMT)
b. k = Particle size multiplier (dimensionless)
c. sL = Silt loading (grams/m²)
d. W = Mean vehicle weight (tons)

Records for fugitive road dust shall be calculated on an annual basis, except this calculation shall be updated if substantial changes to the roads occur, i.e. additional roads added.

7.11.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the permit requirements pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such

deviations, and any corrective actions or preventive measures taken.

7.11.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.11.12 Compliance Procedures

Compliance with the emission limits of section 5 shall be based on the recordkeeping and reporting requirements in this section and the emission factors and methods listed below:

Emissions from unpaved roads shall be calculated based on the following emission factors and formulas from Section 13.2.1 AP-42, Volume I, January, 1995:

$$E = k [sL/2]^{0.65}[W/3]^{1.5}$$

Conversion factors used: 2000 lb/ton

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 _____ **{insert public notice start date}** (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].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

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

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. 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
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

iii. Illinois EPA - Air Permit Section

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

iv. USEPA Region 5 - Air Branch

USEPA (AE - 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

FINAL DRAFT/PROPOSED CAAPP PERMIT
Caterpillar Inc. - East Peoria (TTTD & TBU)
I.D. No.: 179020AAB
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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)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- 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 authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or

resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. 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)(1), (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. Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

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

Where:

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

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

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/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 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

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

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	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	5.15
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
3.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

10.2 Attachment 2 Contemporaneous Increases in Potential Emissions

Table 1

Contemporaneous Increases in Potential Emissions*

<u>Emission Unit</u>	<u>Permit</u>	<u>NO_x</u> <u>(T/Yr)</u>	<u>CO</u> <u>(T/Yr)</u>
Boiler 23	90020040/98040094	35.00	35.00
FD Washers 1-5	97060097	6.71	5.43
FD Boilers 6 and 7	97060097	21.56	18.11
Natural Gas Fired Furnace	97100033	3.94	3.32
Heat Treating Furnace	95060126	0.76	0.64
Paint Booths	95060063	4.97	5.00
		72.94	67.50

Table 2

Contemporaneous Decreases in Actual Emissions**

<u>Emission Unit</u>	<u>Permit</u>	<u>NO_x</u> <u>(T/Yr)</u>	<u>CO</u> <u>(T/Yr)</u>
Coal Fired Boilers	73020936/80020025	319.10	113.95
		319.10	113.95

Table 3

Net Emission Increase

	<u>NO_x Emissions</u> <u>(T/Yr)</u>	<u>CO Emissions</u> <u>(T/Yr)</u>
New Heating System and Other Units	+ 156.80	131.70
Contemporaneous Increase	+ 72.94	67.50
Contemporaneous Decrease	- 319.10	- 114.0
	"0"	85.20

* Maximum emissions allowed by permit.

** Based upon the actual NO_x and CO emissions from the coal fired boilers averaged over two years (1995 and 1996) prior to initiation of the coal to gas conversion project. The shutdown of the coal fired boilers will also result in significant decreases, in excess of 300 tons/year, emissions of SO₂, and PM₁₀, so that the plant's conversion to gas also results in decreases in emissions for these pollutants.

Note: The contemporaneous period is from calendar year 1993 to January 1999.

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: _____

10.4 Attachment 4 Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.

2. Minor Permit Modification

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;

- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or

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- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



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

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	ID number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. ID number:

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents

24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block

This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature:	
BY: _____	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____ / _____ / _____
TYPED OR PRINTED NAME OF SIGNATORY	DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.6 Attachment 6 Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked

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yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

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Mail renewal applications to:

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

SIS:psj

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

Caterpillar Inc. - East Peoria (TTTD & TBU) is located at 901 West Washington Street, East Peoria. This facility produces track-type tractors and transmissions for earth moving equipment. The modern facility is located on 700 acres and consists of seven major structures and approximately 150 acres under roof.

Track-type tractor and transmission components including machined parts, engines, hydraulic components, and electronics controls and systems are shipped to the facility for inclusion in the assembly process. Raw materials including steel plate, bar stock, castings, and forgings are also delivered to the facility and processed into completed sub-assemblies that are supplied to the final assembly process. Operations include shot blasting, metal forming, machining, heat treating, and coating. Following final assembly, the track-type tractors and transmissions are painted prior to shipment.

Natural gas-fired boilers are operated on site to provide process steam and some plant heating. Direct fired natural gas make-up air units are also operated for plant heating purposes. Several diesel engine powered electric generators are located throughout the facility to provide emergency power.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed	Emission Control Equipment
Group 01	Coating Operations:		
	Prime/Top (SS)	4/77	Dry Filter
	Touch-Up (SS)	4/77	Dry Filter
	Prime/Top (LL)	2/95	Waterwall
	Touch-Up (LL)	1986	Dry Filter
	Special Color (LL)	1982	Dry Filter
	Transmission (KK)	8/79	Waterwall
	E-coating (Prime/Top)	2/95	None
Unit 02	Paint Pigment Reclamation System	6/95	3 Dust Collectors, 2 Filter Boxes

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 03	Solvent Still	4/97	None
Unit 04	4,750 Gallon Paint storage Tank	1975	Permanent Submerged Loading Pipe
Unit 05	Natural Gas Fired Boilers:		
	Boiler 23 - 90 MBtu/hr	1990	None
	Boiler 11 (FD 6) - 25.1 MBtu/hr	8/97	None
	Boiler 12 (FD-7) - 25.1 MBtu/hr	8/97	None
	Boiler 5 - 31.4 MBtu/hr	8/98	None
	Boiler 6 - 31.4 MBtu/hr	8/98	None
	Boiler 7 - 31.4 MBtu/hr	8/98	None
	Boiler 8 - 37.7 MBtu/hr	8/98	None
	Boiler 9 - 37.7 MBtu/hr	8/98	None
	Boiler KK - 12.5 MBtu/hr	8/98	None
Unit 06	Diesel Generators:		
	CC3 W2 - Rated Output 1939 kW, 2598 hp	12/94	None
	HH - Rated Output 1350 kw, 1809 hp	9/90	None
	AD 6 - Rated Output 1468 kW, 1967 hp	1984	None
	AD 7 - Rated Output 1468 kW, 1967 hp	1984	None
	AD 8 - Rated Output 1903 kW, 2550 hp	1988	None
Unit 07	Three underground Gasoline Tanks (12,000 gallons each)	6/85	Permanent Submerged Loading Pipes
UNIT 08	Gasoline Storage Tank (15,000 Gallon Capacity)	1975	Submerged Loading Pipe

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 09	Soil Vapor Extraction System	August 1991	Vapor Phase Activated Carbon Absorbers
Unit 10	Aeration Tanks 1 and 2, Air Stripper	April 1997	Vapor Phase Activated Carbon Absorber
Unit 11	Fugitive Emissions from Paved Roads	---	---

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	392.5
Sulfur Dioxide (SO ₂)	1.8
Particulate Matter (PM)	32.7
Nitrogen Oxides (NO _x)	212.0
HAP, not included in VOM or PM	---
TOTAL	639.0

This permit is a combined Title I/CAAPP permit that may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit by T1, T1R, or T1N. The source has requested that the Illinois EPA establish or revise such conditions in a Title I permit, consistent with the information provided in the CAAPP application. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation

agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the 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.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.