

FINAL DRAFT/PROPOSED CAAPP PERMIT
Caterpillar Inc., Decatur Facility
I.D. No.: 115015AAK
Permit Number: 95120183
October 2, 2002

217/782-2113

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

PERMITTEE

Caterpillar, Inc.
Attn.: Gary A. Crull, Environmental Coordinator
27th Street and Pershing Road
Decatur, Illinois 62525

<u>Application No.:</u> 95120183	<u>I.D. No.:</u> 115015AAK
<u>Applicant's Designation:</u>	<u>Date Received:</u> December 8, 1995
<u>Operation of:</u> Construction Machinery and Equipment Manufacturing	
<u>Date Issued:</u> TO BE DETERMINED	<u>Expiration Date²:</u> DATE
<u>Source Location:</u> 27th Street and Pershing Road, Decatur, Macon County	
<u>Responsible Official:</u> Michael A. Flexsenhar, Vice President and General Manager	

This permit is hereby granted to the above-designated Permittee to OPERATE a construction machinery & equipment manufacturing plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

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

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

DES:RWB:jar

cc: Illinois EPA, FOS, Region 3
USEPA

¹ This permit 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

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203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the 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.
27th Street and Pershing Road
Decatur, Illinois 62525
217/475-4025

I.D. No.: 115015AAK
Standard Industrial Classification: 3531, Construction Machinery
and Equipment

1.2 Owner/Parent Company

Caterpillar, Inc.
27th Street and Pershing Road
Decatur, Illinois 62525

1.3 Operator

Caterpillar, Inc.
27th Street and Pershing Road
Decatur, Illinois 62525

Gary A. Crull, Environmental Coordinator
217/475-4025

1.4 General Source Description

Caterpillar Inc. is located at 27th Street and Pershing Road in Decatur. The source manufactures and coats heavy construction and mining equipment, such as motorgraders, off highway trucks, wheel tractor scrapers, and components.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollution 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 27717
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
CFR	Code of Federal Regulations
CO	Carbon Monoxide
°F	degrees Fahrenheit
ft ³	cubic foot
gal	gallon
HAP	Hazardous Air Pollutants
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	kilowatt
l	liter
lb	pound
MACT	Maximum Achievable Control Technology
Mft ³	Million cubic feet
Mg	Metric Tonnes or Megagrams
mmBtu	Million British thermal units
mo	month
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SIC	Standard Industrial Classification
SO ₂	Sulfur Dioxide

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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

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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
wt.	Weight
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

Wastewater Treatment Plant Process Tanks

- 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:

None

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

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

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the

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storage tank is not used for the storage of gasoline
or any material listed as a HAP pursuant to Section
112(b) of the CAA [35 IAC 201.210(a)(10)].

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

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

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

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

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

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
PS01	Robotic Wash and Paint System (2 Paint Booths MD4476 and MD4483)	May, 1990	Filters for Spray Booths (PAF01 and PAF02)
PS02	Customer Acceptance Booth (Paint Booth MD4492)	May, 1990	Filters for Spray Booth (PAF03)
PS03	Component Paint Booth with Natural Gas-Fired Drying Oven (5 mmBtu/hr) (Paint Booth MD4139)	February, 1987	Filters for Spray Booth (PAF04)
PS04	Frame Paint Booth with Natural Gas-Fired Drying Oven (24 mmBtu/hr, Total) (Paint Booth MD4138)	February, 1987	Filters for Spray Booth (PAF05)
PS05	Building "D" Prime Product Paint Booth (Paint Booth MD1688)	November, 1966	Filters for Spray Booth (PAF06)
PS06	Mining Construction Equipment Paint Booth (Paint Booth MD3905)	June, 1983	Filters for Spray Booth (PAF07)
PS07	Wheel Assembly Paint Booth (Paint Booth MD4656)	September, 1992	Filters for Spray Booth (PAF08)
PS08 North	Solvent Distillation, North Unit	2002	Solvent Recycling System Condenser, Vacuum Pump, and Cooling Coils
PS08 South	Solvent Distillation, South Unit	2002	Solvent Recycling System Condenser, Vacuum Pump, and Cooling Coils
S-BAY	S-Bay Paint System Including One Dry-Off Oven	2001	Filters

	(5.0 mmBtu/hr), Two Paint Stations, Two Air Make-Up Units (15.0 mmBtu/hr, Each), and a Cure Oven (1.044 mmBtu/hr)		
Fugitive PM Emissions	Paved Parking Areas	----	None

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 VOM and HAP 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 Fugitive Particulate Matter Operating Program

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

c. Storage Piles

i. All storage piles of materials with uncontrolled emissions of fugitive particulate matter in excess of 45.4 Mg per year (50 T/yr) which are located within a source whose potential particulate emissions from all emission units exceed 90.8 Mg/yr (100 T/yr) shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by Conditions 5.2.3(a) and (b) (see also 35 IAC 212.309, 212.310 and 212.312) [35 IAC 212.304(a)].

ii. Condition 5.2.3(c) (see also 35 IAC 212.304(a)) shall not apply to a specific storage pile if the owner or operator of that pile proves to the Illinois EPA that fugitive particulate emissions from that pile do not cross the property line either by direct wind action or reentrainment [35 IAC 212.304(b)].

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

5.2.4 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.

5.2.5 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.

5.2.6 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.

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5.2.7 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.

5.3 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

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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
Nitrogen Oxides (NO _x)	15.8
Particulate Matter (PM)	5.09
Sulfur Dioxide (SO ₂)	0.1
Volatile Organic Material (VOM)	191.77
HAP, not included in VOM or PM	14.5
Total	227.26

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

The annual emissions from the source shall not exceed the following limitations:

- a. i. Emissions from the S-Bay Paint System (including emissions associated with all paints, solvents and peelable masking in the affected paint booth) shall not exceed the following limits:

VOM Emissions	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
9.19	91.84

These limits are based on the maximum material usage and the compliance procedures specified in Conditions 7.1.12 and 7.2.12. The annual limit represents an increase of 37.47 tons based on the actual emission decrease from the R-Bay and D Paint Systems of 54.37 tons.

- ii. This permit is issued based upon the shutdown of existing R-Bay (the two robotic booths) and D Paint Systems as a result of the new S-Bay Paint System, which will handle production previously painted in these units. These

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existing units shall be shutdown when the S-Bay Paint System begins normal operation.

- iii. Notwithstanding Conditions 5.5.3(a)(ii) and 7.1.6(d), R-Bay and D Paint Systems may be operated until August 31, 2003. This period may be extended by the Illinois EPA upon written request by the Permittee demonstrating that additional time is needed for transfer of production due to unanticipated delays. After this period, the R-Bay and D Paint Systems must be shut down.
 - A. During this period, the emission from the S-Bay, R-Bay and D Paint Systems combined shall not exceed the emission limits specified in Condition 5.5.3(a)(i).
 - B. During this period, the recordkeeping requirements (See Condition 5.6.3) and compliance procedures 5.9.3) will be used to determine compliance with the emission limits in condition 5.5.3(a)
- iv. The limits on VOM are limitations established in Permit 00110003, pursuant to 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 Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. See Condition 7.2.6 [T1].
- b.
 - i. The emissions of hazardous air pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the S-Bay Paint System shall not exceed 8.0 tons/year of any single HAP and 17.4 tons/year of any combination of such HAPs.
 - ii. The limits on HAP emissions are limitations established in Permit 00110003, pursuant to Section 112(g) of the CAA. These limits

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ensure that the construction and/or
modification addressed in the aforementioned
permit does not trigger the requirements of
Section 112(g) of the CAA.

- c. 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).

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 of Fugitive Emissions from Road Dust

- a. The Permittee shall maintain a record of the maximum aggregate annual emissions of fugitive PM from the traffic areas at the source (i.e., road dust) estimated based on the applicable emission factors and formulas specified by Condition 5.9.2, with supporting calculations, so as to demonstrate compliance with the limits in Condition 5.5.
- b. This record shall be updated upon construction of additional roadways or parking areas or other permanent change to the source that alters the maximum aggregate emissions of PM.

5.6.3 The Permittee shall maintain records of the following items for the R-Bay (the two robotic booths), D Paint, and S-Bay Paint Systems, so as to demonstrate compliance with the emission limits in Condition 5.5.3:

- a. Amount of each material used (gallons/month and gallons/year) for the affected coating lines;
- b. Amount of solvent reclaimed (gallons/month and gallons/year) for the affected coating lines;
- c. Amount of waste shipped offsite (pounds/month and pounds/year) for the affected coating lines;
- d. VOM and HAP content (weight percent) of each material used for the affected coating lines;

- e. Density of each material used (pounds/gallon) for the affected coating lines; and
- f. The aggregate monthly and annual VOM and HAP emissions from for the affected coating lines based on the coating and material usage, the VOM and HAP contents of such materials, with supporting calculations.

5.6.4 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

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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 the use of USEPA approved emissions estimating guidance.

5.9.2 General Procedures for Calculating Fugitive Emissions from Paved Parking Areas

For the purpose of estimating fugitive PM emissions from the paved roadways at the source, the emission factors and formulas in Sections 13.2.1 of AP-42, Volume I, Fifth Edition, Supplement D, October, 1997 are acceptable.

5.9.3 General Procedures for Calculating VOM and HAP Emissions from the R-Bay (the two robotic booths), D Paint and S-Bay Paint Systems

To determine compliance with Condition 5.5.3 and 7.2.6, VOM and HAP emissions from the R-Bay (the two robotic booths), D Paint, and S-Bay Paint Systems shall be calculated based on the following:

a. Volatile Organic Material Emissions:

$$\text{VOM Emissions (tons)} = [(\text{Material Usage, gal}) \times (\text{Material Density, lb/gal}) \times (\text{VOM Content of Material, \% by Wt.}) - (\text{Reclaimed Solvent Usage, gal}) \times (\text{VOM Content of Reclaimed Solvent, lb VOM/gal}) - (\text{Waste Shipped Offsite, lb})] / (2000 \text{ lb/ton})$$

b. Hazardous Air Pollutant Emissions:

$$\text{HAP Emissions (tons)} = [(\text{Material Usage, gal}) \times (\text{density of material, lb/gal}) \times (\text{HAP Content of Material, \% by Wt.})] / (2000 \text{ lb/ton})$$

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6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

- 7.1 Units PS01 - PS07: Paint Booths/Coating Lines
Controls PAF01 - PAF08: Paint Booth Filters

7.1.1 Description

The painting of heavy construction and mining equipment is performed in eight paint booths at this source. These coating lines include two robot paint booths, a customer acceptance booth, a frame paint booth, a component paint booth, the Building "D" paint booth, and a wheel line paint booth.

The robot paint system consists of a preparation area, a wash area, and two paint booths. The system is designed for paint the heavy construction equipment produced at the source. The vehicles are washed, painted, and oven cured. The final coat of paint is a two-part polyurethane. Automatic guided vehicles transport the product throughout the entire paint process. The product is first delivered to the wash booth, which is totally enclosed. The product is then washed by robots and is blow dried with filtered compressed air. The vehicles then enter one of the finish paint booths. Each booth is totally enclosed and the painting is done by robots. The equipment is capable of applying paint through proportioning units that utilize airless, electrostatic paint spray guns with variable fan patterns. Viscosity, pressure, and temperature of the paint is constantly monitored and controlled. After painting is complete, the vehicles leave the paint booth and enter an oven. The oven is steam heated and will provided heated air for the paint cure.

The Customer Acceptance Booth is used for finish painting. Products are painted are the same as products in the Robot Paint System and the Mining and Construction Equipment Paint Booth. Automated Guided Vehicles deliver and remove vehicles. The vehicles enter the totally enclosed paint booth and are painted by hand. The paint is applied with an airless, electrostatic paint gun. Viscosity, pressure, and temperature of the paint is closely monitored and controlled. After painting, the Automated Guided Vehicles remove the painted units from the booth and moves it to the oven, which is steam heated and provides heated air for the paint cure.

The Component Paint Booth is used to paint large components for motorgraders. These components are washed, painted, and oven cured in this paint booth. These components consist of motorgrader circles, moldboards, and drawbars and are placed in the booth before assembly. The booth door is closed before washing begins. The components are washed, rinsed, misted with a rust inhibitor, and then blow-dried with filtered compressed air. After the wash is complete the components are painted in a closed atmosphere and the painting equipment has the capability to apply preheated plural component catalyzed paint through paint proportioning units. An air assisted airless electrostatic paint spray gun with a variable fan pattern is used. Viscosity, pressure, and temperature of the paint are constantly monitored. After painting is complete, the components are placed into the curing oven and the oven door will be closed before paint drying begins. The natural gas-fired oven has heated air circulating within to cure the paint.

The Frame Paint Booth is used to paint the case and frames of motorgraders, wheel tractors, and off-highway trucks. The frames for motorgraders, tractors, trucks, and truck-tractors are washed, painted, and oven cured. The frames enter the wash booth after fabrication and the wash booth door is closed before washing begins. The frames are washed, rinsed, misted with a rust inhibitor, and then blow-dried with filtered compressed air. The frames then enter the frame prime paint booth and the paint booth door is closed before painting begins. Painting is done in a closed atmosphere with automatic preprogrammed robots. The equipment has the capability to apply preheated plural component catalyzed paint through paint proportioning units. An air assisted airless electrostatic paint spray gun with a variable fan pattern is used. Viscosity, pressure, and temperature of the paint are constantly monitored. After painting is complete, the frames are placed into the curing oven and the oven door will be closed before paint drying begins. The natural gas-fired oven has heated air circulating within to cure the paint.

The Building "D" spray paint system is a large down draft paint booth with dry filters. Both priming and finish painting is conducted in this booth. Products are set on paint dollies and pulled through the booth by two floor

conveyor chains. Miscellaneous parts are spray-painted in an area between the two moving lines. The priming line is a touch-up operation after final assembly for purchase finish parts and parts not painted in other prime paint booths. The miscellaneous parts are attachments or parts assembled to the manufactured parts after finish painting. This booth is primarily used for finish painting of the heavy mining and construction equipment produced at the source. The painted vehicle will exit the booth and it is estimated that 70% of the drying time is on the conveyor, outside the booth.

The Mining and Construction Equipment Paint process is comprised of a wash booth, a paint booth, and a curing oven.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
PS01	Robotic Wash and Paint System (2 Paint Booths MD4476 and MD4483)	Filters for Spray Booths (PAF01 and PAF02)
PS02	Customer Acceptance Booth (Paint Booth MD4492)	Filters for Spray Booth (PAF03)
PS03	Component Paint Booth with Natural Gas-Fired Drying Oven (5 mmBtu/hr) (Paint Booth MD4139)	Filters for Spray Booth (PAF04)
PS04	Frame Paint Booth with Natural Gas-Fired Drying Oven (24 mmBtu/hr, total) (Paint Booth MD4138)	Filters for Spray Booth (PAF05)
PS05	Building "D" Prime Product Paint Booth (Paint Booth MD1688)	Filters for Spray Booth (PAF06)
PS06	Mining Construction Equipment Paint Booth (Paint Booth MD3905)	Filters for Spray Booth (PAF07)
PS07	Wheel Assembly Paint Booth (Paint Booth MD4656)	Filters for Spray Booth (PAF08)

7.1.3 Applicability Provisions and Applicable Regulations

- a. The Paint Booths listed in Condition 7.1.2 are "affected coating lines" for the purpose of these unit-specific conditions.
- b. Each affected coating line is subject to the emission limits identified in Condition 5.2.2.
- c. Affected coating lines PS01, PS02, PS03, PS04, PS06, and PS07 are subject to 35 IAC 212.321(a), which provides that:

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

- d. Affected coating line PS05 is subject to 35 IAC 212.322(a), 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 prior to 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 212.322 (see also Attachment 2) [35 IAC 212.322(a)].

- e. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].
- f. Pursuant to 35 IAC 215.204, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. The following

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emission limitations are 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, except where noted. 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 composition. The emission limitations are as follows:

- i. Miscellaneous Metal Parts and Products Air Dried Coating [35 IAC 215.204(j)(2)]:

kg/l	lb/gal
0.42	3.5

- ii. Miscellaneous Metal Parts and Products Extreme Performance Coating [35 IAC 215.204(j)(3)]:

kg/l	lb/gal
0.42	3.5

- iii. Miscellaneous Metal Parts and Products All Other Coatings [35 IAC 215.204(j)(5)]:

kg/l	lb/gal
0.36	3.0

- iv. Heavy Off-Highway Vehicle Products coating (in the remaining counties excluding Macoupin County) [35 IAC 215.204(k)(2)]:

Extreme performance prime coat:

kg/l	lb/gal
0.42	3.5

Extreme performance top coat-air dried:

kg/l	lb/gal
0.52	4.3

Final repair coat-air dried:

kg/l	lb/gal
0.58	4.8

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected coating lines are not subject to the NSPS for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60 Subpart MM because each affected coating line is not a prime coat operation, a guide coat operation, or a topcoat operation at an automobile or light-duty truck assembly plant.
- b. The affected coating lines are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM₁₀, as identified in 35 IAC 212.324(a)(1).
- c. No owner or operator of a coating line subject to the limitations of 35 IAC 215.204 is required to meet the limitations of 35 IAC 215.301 or 215.302, Use of Organic Material, after the date by which the coating line is required to meet 35 IAC 215.204 [35 IAC 215.209].
- d. The curing and drying ovens associated with the affected coating lines are not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the actual heat input is less than 2.9 MW (10 mmBtu/hr) and each curing and drying oven is not by definition a fuel combustion emission unit.
- e. The curing and drying ovens associated with the affected coating lines are not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input is less than 73.2 MW (250 mmBtu/hr) and each curing and drying oven is not by definition a fuel combustion emission unit.
- f. This permit is issued based on the affected coating lines not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected coating lines do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.1.5 Operational and Production Limits and Work Practices

- a. The Permittee shall follow good operating practices for the paint booth filters, including periodic inspection, routine maintenance and prompt repair of defects.
- b. The curing and drying ovens associated with the affected coating lines shall only be operated with natural gas as the fuel.

7.1.6 Emission Limitations

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

- a. i. Usage of paint, VOM content of paints and VOM emissions of the MD4138 paint booth shall not exceed the following:

<u>Paint Usage</u> (gal/mo)	<u>Paint Usage</u> (gal/yr)	<u>VOM Content</u> (lb/gal)	<u>VOM Emissions</u> (Ton/mo)	<u>VOM Emissions</u> (Ton/yr)
2,500	25,680	3.5	4.4	44.9

- ii. The above limitations were established in Permit 87020034, pursuant to 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 Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

- b. i. Usage of paint, VOM content of paints and VOM emissions of the MD4139 paint booth shall not exceed the following:

<u>Paint Usage</u> (gal/mo)	<u>Paint Usage</u> (gal/yr)	<u>VOM Content</u> (lb/gal)	<u>VOM Emissions</u> (Ton/mo)	<u>VOM Emissions</u> (Ton/yr)
1,250	12,840	3.5	2.2	22.5

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- ii. The above limitations were established in Permit 87020072, pursuant to 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 Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].
- c. Emissions and operation of the Customer Acceptance paint booths shall not exceed the following limits:

- i. Emissions of volatile organic material (VOM), paint usage, and VOM content of paint of the booth shall not exceed the following:

	Equipment	Paint Usage	VOM Content	VOM Emissions		
<u>Identification</u>	<u>(gal/mo)</u>	<u>(gal/yr)</u>	<u>(lb/gal)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>	
MD 4492, Booth #3	1,500	11,752	4.3	3.2	25.3	

- ii. This permit is issued based on negligible emissions of particulate matter from the paint booth with filters. For this purpose emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
 - iii. The above limitations were established in Permit 90020050, pursuant to 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 Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].
- d. This permit is issued based upon the shutdown of existing R-Bay (the two robotic booths) and D Paint

Systems as a result of the new S-Bay Paint System, which will handle production previously painted in these units. These existing units shall be shutdown when the S-Bay Paint System begins normal operation.

- i. Notwithstanding Conditions 5.5.3(a)(ii) and 7.1.6(d), R-Bay and D Paint Systems may be operated until August 31, 2003. This period may be extended by the Illinois EPA upon written request by the Permittee demonstrating that additional time is needed for transfer of production due to unanticipated delays. After this period, the R-Bay and D Paint Systems must be shut down.
 - A. During this period, the emission from the S-Bay, R-Bay and D Paint Systems combined shall not exceed the emission limits specified in Condition 5.5.3(a)(i).
 - B. During this period, the recordkeeping requirements (See Condition 5.6.3) and compliance procedures 5.9.3) will be used to determine compliance with the emission limits in condition 5.5.3(a)
- ii. The above limitations were established in Permit 00110003, pursuant to 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 Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].
- e. 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).

7.1.7 Testing Requirements

- a. The VOM content of coatings shall be determined by Method 24, 40 CFR Part 60, Appendix A, except for glues and adhesive coatings, two component reactive coatings forming volatile reaction products, coatings requiring energy other than heat to initiate curing, and coatings requiring high temperature catalysis for curing, providing the person proposing testing of the material submits to the Illinois EPA proof that the Method 24 results would not be representative and proof that a proposed alternative test method gives representative, accurate test results. For printing inks, the volatile organic material content shall be determined by Method 24A, 40 CFR Part 60, Appendix A. Any alternate test method must be approved by the Illinois EPA which shall consider data comparing the performance of the proposed alternative to the performance of the approved test method(s). If the Illinois EPA determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test method(s), the Illinois EPA shall approve the proposed alternative [35 IAC 215.208(a)].
- b. Transfer efficiency shall be determined by a method, procedure or standard approved by the USEPA, under the applicable new source performance standard or until such time as USEPA has approved and published such a method, procedure or standard, by any appropriate method, procedure or standard approved by the Illinois EPA [35 IAC 215.208(b)].
- c. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the VOM content of specific coatings and cleaning solvents used on the affected coating lines shall be determined as follows:
 - i. The VOM content of representative coatings "as applied" on the affected coating line 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.
 - ii. 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(c)(ii) directly reflect the application of such material and separately account for any additions of solvent.

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected coating lines to demonstrate compliance with Conditions 5.5.1, 7.1.3, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of VOM content of coatings and cleaning solvents pursuant to Condition 7.1.7, 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.
- b. The owner or operator of the coating plant shall maintain records of the density of the volatile organic material in each coating, the quantity and volatile organic material and solids content of each coating applied and the line to which coating is applied, in such a manner so as to demonstrate continuing compliance with the combined allowable emissions [35 IAC 215.207(d)].
- c. Pursuant to 39.5(7)(e) of the Act, the Permittee shall collect and record all of the following information each day for the affected coating lines and maintain the information at the source for a period of five years:
 - i. The name and identification number of each coating as applied on each coating line; and

- ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- d. Records addressing use of good operating practices for the paint booth filters:
 - i. Records for periodic inspection of the paint booth filters with date, individual performing the inspection, and nature of inspection; and
 - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- e. Coating usage of the affected coating lines, gal/mo and gal/yr;
- f. VOM content of coatings, % by wt.;
- g. Density of coatings, lb/gal;
- h. Cleanup solvent usage, gal/mo and gal/yr;
- i. Density of solvent, lb/gal;
- j. The natural gas usage of the curing and drying ovens associated with the affected coating lines, Mft³/mo and Mft³/yr;
- k. The operating schedule of the affected coating lines;
- l. The aggregate monthly and annual PM and VOM emissions from the affected coating lines based on the coating and solvent usage, the VOM content of such materials, the operating schedule and the typical hourly emission rate, with supporting calculations; and
- m. The monthly and aggregate annual NO_x, PM, SO₂, and VOM emissions from the curing and drying ovens associated with the affected coating lines based on the fuel usage and standard emission factors, with supporting calculations.

7.1.10 Reporting Requirements

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

- a. Pursuant to Section 39.5(7)(f) of the Act, the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.1.3(f) (see also 35 IAC 215.204) within 30 days following the occurrence of the violation.
- b. Continued operation of an affected coating line with a defect in a paint booth filter that may result in emissions of particulate matter in excess of limits in Conditions 7.1.3(b), (c), or (d) within 30 days of such an occurrence.
- c. Emissions of VOM in excess of the limits specified in Condition 7.1.6 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 lines 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 different materials for the affected paint booth, provided that the Permittee continues to comply with the conditions of this permit.

7.1.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

- a. Compliance with Conditions 7.1.3(b), (c), and (d) is assumed by proper operation of the paint booth filters, as addressed by Conditions 7.1.5 and 7.1.9(d).
- b. Compliance with Condition 7.1.3(e) is assumed by the work-practices inherent in operation of natural gas-fired curing and drying ovens.
- c. To determine compliance with Conditions 5.5.1, 5.5.3, and 7.1.6, PM and VOM emissions from the affected coating lines shall be calculated based on the following:
 - i. Volatile Organic Material Emissions:
$$\text{VOM (lb)} = [(\text{Coating Usage, gal}) \times (\text{Coating Density, lb/gal}) \times (\text{VOM Content of Coating, \% by Wt.})] + [(\text{Cleaning Solvent Usage, gal}) \times (\text{Solvent Density, lb/gal})]$$
 - ii. Particulate Matter Emissions:
$$\text{PM (lb)} = (\text{Coating Usage, gal}) \times (\text{Coating Density, lb/gal}) \times (\text{Wt \% Solids}) \times [1 - (\text{Transfer Efficiency}^* (\%)/100)] \times [1 - (\text{Filter Efficiency}^* (\%)/100)]$$

* As specified by manufacturer or vendor of the spray booths and paint booth filters
- d. To determine compliance with Condition 5.5.1, fuel combustion emissions from the curing and drying ovens associated with the affected coating line shall be calculated based on the following emission factors:

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

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, March, 1998.

Curing and Drying Oven Emissions (lb) = (Natural Gas Consumed, Mft³) x (The Appropriate Emission Factor, lb/Mft³)

7.2 Unit S-BAY: S-Bay Paint System
 Control S-BAY: Filters

7.2.1 Description

Caterpillar's new S-Bay Paint System will allow the source to paint existing components as well as new product lines at the plant. Within the S-Bay Paint System, parts will be washed, dried, masked, painted, cured and de-masked/assembled/unloaded. The painting process is done in two paint stations. Each paint station utilizes two-stage filter systems to control particulate emissions and a 15 mmBtu/hr make-up air units to provide fresh air.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
S-BAY	S-Bay Paint System Including One Dry-Off Oven (5.0 mmBtu/hr), Two Paint Stations, Two Air Make-Up Units (15.0 mmBtu/hr, Each), and a Cure Oven (1.044 mmBtu/hr)	Filters

7.2.3 Applicability Provisions and Applicable Regulations

- a. The S-Bay Paint System listed in Condition 7.2.2 is an "affected coating line" for the purpose of these unit-specific conditions.
- b. The affected coating line is subject to the emission limits identified in Condition 5.2.2.
- c. The affected coating line is subject to 35 IAC 212.321(a), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or

premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

- d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].

- f. Pursuant to 35 IAC 215.204(k)(2), no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. The following emission limitations are 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, except where noted. 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 composition. The emission limitations for Heavy Off-Highway Vehicle Products coating (in the remaining counties excluding Macoupin County) are as follows:

Extreme performance prime coat:

kg/l	lb/gal
0.42	3.5

Extreme performance top coat-air dried:

kg/l	lb/gal
0.52	4.3

Final repair coat-air dried:

kg/l	lb/gal
0.58	4.8

7.2.4 Non-Applicability of Regulations of Concern

- a. The air make-up units associated with the affected coating line are not subject to the NSPS for Small Industrial-Commercial Institutional Steam Generating Units, 40 CFR 60 Subpart Dc because the air make-up units are not by definition steam generating units.

- b. The affected coating line is not subject to the NSPS for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60 Subpart MM because the affected coating line is not a prime coat operation, a guide coat operation, or a topcoat operation at an automobile or light-duty truck assembly plant.
- c. The affected coating line is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM₁₀, as identified in 35 IAC 212.324(a)(1).
- d. No owner or operator of a coating line subject to the limitations of 35 IAC 215.204 is required to meet the limitations of 35 IAC 215.301 or 215.302, Use of Organic Material, after the date by which the coating line is required to meet 35 IAC 215.204 [35 IAC 215.209].
- e. The curing and drying ovens associated with the affected coating line are not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because each curing and drying oven is not by definition a fuel combustion emission unit.
- f. The curing and drying ovens associated with the affected coating line are not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input is less than 73.2 MW (250 mmBtu/hr) and each curing and drying oven is not by definition a fuel combustion emission unit.
- g. This permit is issued based on the affected coating lines not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected coating lines do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.5 Operational and Production Limits and Work Practices

- a. The Permittee shall follow good operating practices for the paint booth filters, including periodic

inspection, routine maintenance and prompt repair of defects.

- b. Natural gas shall be the only fuel fired in the air make-up units, dry-off oven, and cure oven.

7.2.6 Emission Limitations

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

- a. Emissions from the affected coating line (including emissions associated with all paints, solvents and peelable masking in the affected paint booth) shall not exceed the following limits:

VOM Emissions	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
9.19	91.84

These limits are based on the maximum material usage and the compliance procedures specified in Condition 7.2.12. The annual limit represents an increase of 37.47 tons based on the actual emission decrease from the R-Bay and D Paint Systems of 54.37 tons.

- b. Emissions from the two air make-up units, dry-off oven, and cure oven shall not exceed the following limits:

<u>Pollutant</u>	Emissions	
	<u>(Ton/mo)</u>	<u>(Ton/yr)</u>
NO _x	1.6	15.8
CO	1.4	13.3
PM	0.2	1.2
VOM	0.1	0.9
SO ₂	0.1	0.1

These limits are based on the maximum firing rate, the maximum hours of operation (8,760 hours/year), and emission factors and formulas in Condition 7.2.12.

- c. The above limitations were established in Permit 00110003, pursuant to 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 Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

- d. i. The emissions of hazardous air pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the S-Bay Paint System shall not exceed 8.0 tons/year of any single HAP and 17.4 tons/year of any combination of such HAPs.
 - ii. The limits on HAP emissions are limitations established in Permit 00110003, pursuant to Section 112(g) of the CAA. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not trigger the requirements of Section 112(g) of the CAA.
- e. 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! !OR T1R! !OR T1N!].

7.2.7 Testing Requirements

- a. The VOM content of coatings shall be determined by Method 24, 40 CFR Part 60, Appendix A, except for glues and adhesive coatings, two component reactive coatings forming volatile reaction products, coatings requiring energy other than heat to initiate curing, and coatings requiring high temperature catalysis for curing, providing the person proposing testing of the material submits to the Illinois EPA proof that the Method 24 results would not be representative and proof that a proposed alternative test method gives representative, accurate test results. For printing inks, the volatile organic material content shall be determined by Method 24A, 40 CFR Part 60, Appendix A. Any alternate test method must be approved by the Illinois EPA which shall consider data comparing the performance of the proposed alternative to the performance of the approved test method(s). If the

Illinois EPA determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test method(s), the Illinois EPA shall approve the proposed alternative [35 IAC 215.208(a)].

- b. As an alternative to Condition 7.2.7(a), the manufacturer's specifications for VOM content for coatings may be used if such manufacturer specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 IAC 218.105(a); provided, however, Method 24, 40 CFR Part 60, Appendix A, shall be used to determine compliance.
- c. Transfer efficiency shall be determined by a method, procedure or standard approved by the USEPA, under the applicable new source performance standard or until such time as USEPA has approved and published such a method, procedure or standard, by any appropriate method, procedure or standard approved by the Illinois EPA [35 IAC 215.208(b)].
- d. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the VOM content of specific coatings and cleaning solvents used on the affected coating lines shall be determined as follows:
 - i. The VOM content of representative coatings "as applied" on the affected coating line 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.
 - ii. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records pursuant to Condition 7.2.9(c)(ii) directly reflect the application of such material and separately account for any additions of solvent.

7.2.8 Monitoring 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 coating line to demonstrate compliance with Conditions 5.5.1, 5.5.3, 7.2.3, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of VOM content of coatings and cleaning solvents pursuant to Condition 7.2.7, 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.
- b. The owner or operator of the coating plant shall maintain records of the density of the volatile organic material in each coating, the quantity and volatile organic material and solids content of each coating applied and the line to which coating is applied, in such a manner so as to demonstrate continuing compliance with the combined allowable emissions [35 IAC 215.207(d)].
- c. Pursuant to 39.5(7)(e) of the Act, the Permittee shall collect and record all of the following information each day for the affected coating lines and maintain the information at the source for a period of five years:
 - i. The name and identification number of each coating as applied on each coating line; and
 - ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- d. Records addressing use of good operating practices for the paint booth filters:

- i. Records for periodic inspection of the paint booth filters with date, individual performing the inspection, and nature of inspection; and
 - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- e. Amount of each material used (gallons/month and gallons/year);
 - f. Amount of solvent reclaimed (gallons/month and gallons/year);
 - g. Amount of waste shipped offsite (pounds/month and pounds/year);
 - h. VOM and HAP content (weight percent) of each material used;
 - i. Density of each material used (pounds/gallon);
 - j. The natural gas usage of the air make-up units, curing ovens, and drying ovens associated with the affected coating line, Mft³/mo and Mft³/yr;
 - k. The operating schedule of the affected coating line;
 - l. The aggregate monthly and annual PM, VOM, and HAP emissions from the affected coating line based on the coating and material usage, the VOM and HAP contents of such materials, the operating schedule and the typical hourly emission rate, with supporting calculations; and
 - m. The monthly and aggregate annual CO, NO_x, PM, SO₂, and VOM emissions from the air make-up units, curing ovens, and drying ovens associated with the affected coating lines based on the fuel usage and standard emission factors, with supporting calculations.

7.2.10 Reporting Requirements

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

- a. Pursuant to Section 39.5(7)(f) of the Act, the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.2.3(e) (see also 35 IAC 215.204) within 30 days following the occurrence of the violation.
- b. Continued operation of an affected coating line with a defect in a paint booth filter that may result in emissions of particulate matter in excess of limits in Conditions 7.2.3(b) or (c) within 30 days of such an occurrence.
- c. Emissions of CO, NO_x, PM, SO₂, VOM, and/or HAPs in excess of the limits specified in Conditions 5.5.3 or 7.2.6 within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected coating line 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 different materials for the affected paint booth, provided that the Permittee continues to comply with the conditions of this permit.

7.2.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

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- a. Compliance with Conditions 7.2.3(b) and (c) is assumed by proper operation of the paint booth filters, as addressed by Conditions 7.2.5 and 7.2.9(d).
- b. Compliance with Condition 7.2.3(d) is assumed by the work-practices inherent in operation of natural gas-fired air make-up units, curing ovens, and drying ovens.

c. To determine compliance with Conditions 5.5.1, 5.5.3, and 7.2.6, PM, VOM, and HAP emissions from the affected coating line shall be calculated based on the following:

i. Volatile Organic Material Emissions:

$$\text{VOM Emissions (tons)} = [(\text{Material Usage, gal}) \times (\text{Material Density, lb/gal}) \times (\text{VOM Content of Material, \% by Wt.}) - (\text{Reclaimed Solvent Usage, gal}) \times (\text{VOM Content of Reclaimed Solvent, lb VOM/gal}) - (\text{Waste Shipped Offsite, lb})] / (2000 \text{ lb/ton})$$

ii. Hazardous Air Pollutant Emissions:

$$\text{HAP Emissions (tons)} = [(\text{Material Usage, gal}) \times (\text{density of material, lb/gal}) \times (\text{HAP Content of Material, \% by Wt.})] / (2000 \text{ lb/ton})$$

iii. Particulate Matter Emissions:

$$\text{PM (lb)} = (\text{Coating Usage, gal}) \times (\text{Coating Density, lb/gal}) \times (\text{Wt \% Solids}) \times [1 - (\text{Transfer Efficiency}^* (\%)/100)] \times [1 - (\text{Filter Efficiency}^* (\%)/100)]$$

* As specified by manufacturer or vendor of the spray booths and paint booth filters

d. To determine compliance with Conditions 5.5.1 and 7.2.6(b), fuel combustion emissions from the curing and drying ovens associated with the affected coating line shall be calculated based on the following emission factors:

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

These are the emission factors for uncontrolled

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natural gas combustion in small boilers (< 100
mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I,
Fifth Edition, March, 1998.

Air Make-Up Unit, Curing Oven and Drying Oven
Emissions (lb) = (Natural Gas Consumed, Mft³) x (The
Appropriate Emission Factor, lb/Mft³)

- 7.3 Units SOLVNTRCLM: Solvent Reclamation Units
 Controls SOLVNTRCLM: Integral Condensers

7.3.1 Description

The Solvent Reclamation Units are intended to remove solvents from waste paint and flushing solvents. The evaporated solvents are condensed to a liquid and captured in a 55 gallon drum to be reused as flushing solvents in the source's paint booths. The system is comprised of two distillation units, which are integrally combined with a condenser. These units operate independently and are closed loop systems.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
PS08 North	Solvent Distillation, North Unit	Solvent Recycling System Condenser, Vacuum Pump, and Cooling Coils
PS08 South	Solvent Distillation, South Unit	Solvent Recycling System Condenser, Vacuum Pump, and Cooling Coils

7.3.3 Applicability Provisions and Applicable Regulations

- a. The Solvent Reclamation Units listed in Condition 7.3.2 are an "affected solvent reclamation system" for the purpose of these unit-specific conditions.
- b. The affected solvent reclamation system is subject to the emission limits identified in Condition 5.2.2.
- c. The affected solvent reclamation system is subject to 35 IAC 212.321(a), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates

specified in subsection (c) of 35 IAC 212.321
(see also Attachment 1) [35 IAC 212.321(a)].

- d. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission source, except as provided in 35 IAC 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 215 Subpart K shall apply only to photochemically reactive material. [35 IAC 215.301].

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected solvent reclamation system is not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM₁₀, as identified in 35 IAC 212.324(a)(1).
- b. This permit is issued based on the affected solvent reclamation system not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected solvent reclamation system does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.3.5 Operational and Production Limits and Work Practices

The Permittee shall follow good operating practices for the condenser including periodic inspection, routine maintenance and prompt repair of defects.

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 reclamation system is subject to the following:

- a. Number of gallons processed from each unit of the solvent reclamation system and emissions of volatile organic material (VOM) shall not exceed the following:

Gallons Processed		VOM Emissions	
<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>	<u>(lb/Hour)</u>	<u>(Tons/Year)</u>

3,000 29,000 0.2 0.5

- b. The condenser/cooling coil shall be operated such that the temperature of the reclaimed solvent exiting the cooling coil shall not exceed 75 F.
- c. 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).
- d. The above limitations were established in Permits 91060066 and 02030018, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

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

- a. Records addressing use of good operating practices for the condenser:
 - i. Records for periodic inspection of the condenser with date, individual performing the inspection, and nature of inspection; and

- ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- b. Records of the amount of waste solvent processed in the affected solvent reclamation system, gal/mo and gal/yr;
- c. The operating schedule of the affected solvent reclamation system; and
- d. Records of monthly and annual aggregate PM and VOM emissions from the affected solvent reclamation system shall be maintained, based on amount of waste solvent processed, applicable emission factors, with supporting calculations.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected solvent 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 or VOM in excess of the limits in Condition 7.3.6(a) within 30 days of a record showing such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

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

To determine compliance with Conditions 5.5.1, 7.3.3, and 7.3.6, emissions from the affected solvent reclamation system shall be calculated based on the following emission factors:

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<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/ton)</u>
PM	1.44
VOM	3.30

These are the emission factors for solvent reclaiming, Table 4.7-1, AP-42, Volume I, Fifth Edition, October, 1996. PM emission factor is based on the incinerator stack emission factor. VOM emission factor is based on the condenser vent emission factor.

Solvent Reclaiming Emissions (lb) = (Amount of Waste Solvent Processed, gal) x (Density of Waste Solvent, lb/gal) x (1 Ton/2,000 lb) x (The Appropriate Emission Factor, 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 applicable to this source 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;

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- 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

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ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

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 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

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the

date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

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

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
 - ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

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

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

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

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

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

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

Where:

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

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

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.214	2.54
B	0.534	0.534

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

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	11.42	24.8

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B 0.16 0.16

c. Limits for Process Emission Units For Which
Construction or Modification Commenced On or After
April 14, 1972 [35 IAC 212.321(c)]:

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

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

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

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

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

Where:

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

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

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

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

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

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

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

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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; or

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- 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

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- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- 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
	I.D. 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. I.D. 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:	

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.



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

22. Technical contact person for application:	23. Contact person's telephone number:
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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: _____ <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> _____ AUTHORIZED SIGNATURE </div> <div style="text-align: center;"> _____ TITLE OF SIGNATORY </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> _____ TYPED OR PRINTED NAME OF SIGNATORY </div> <div style="text-align: center;"> _____ / _____ / _____ DATE </div> </div>	

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 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.

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

Project Summary

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. is located at 27th Street and Pershing Rd in Decatur. The source manufactures and coats heavy construction and mining equipment, such as motorgraders, off highway trucks, wheel tractor scrapers, and components.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed	Emission Control Equipment
PS01	Robotic Wash and Paint System (2 Paint Booths MD4476 and MD4483)	May, 1990	Filters for Spray Booths (PAF01 and PAF02)
PS02	Customer Acceptance Booth (Paint Booth MD4492)	May, 1990	Filters for Spray Booth (PAF03)
PS03	Component Paint Booth with Natural Gas-Fired Drying Oven (5 mmBtu/hr) (Paint Booth MD4139)	February, 1987	Filters for Spray Booth (PAF04)
PS04	Frame Paint Booth with Natural Gas-Fired Drying Oven (24 mmBtu/hr, Total) (Paint Booth MD4138)	February, 1987	Filters for Spray Booth (PAF05)
PS05	Building "D" Prime Product Paint Booth (Paint Booth MD1688)	November, 1966	Filters for Spray Booth (PAF06)
PS06	Mining Construction Equipment Paint Booth (Paint Booth MD3905)	June, 1983	Filters for Spray Booth (PAF07)
PS07	Wheel Assembly Paint Booth (Paint Booth MD4656)	September, 1992	Filters for Spray Booth (PAF08)
PS08 North	Solvent Distillation, North Unit	2002	Solvent Recycling System Condenser, Vacuum Pump, and Cooling

			Coils
PS08 South	Solvent Distillation, South Unit	2002	Solvent Recycling System Condenser, Vacuum Pump, and Cooling Coils

Emission Unit	Description	Date Constructed	Emission Control Equipment
S-BAY	S-Bay Paint System Including One Dry-Off Oven (5.0 mmBtu/hr), Two Paint Stations, Two Air Make-Up Units (15.0 mmBtu/hr, Each), and a Cure Oven (1.044 mmBtu/hr)	2001	Filters
Fugitive PM Emissions	Paved Parking Areas	----	None

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
Nitrogen Oxides (NO _x)	15.8
Particulate Matter (PM)	5.09
Sulfur Dioxide (SO ₂)	0.1
Volatile Organic Material (VOM)	191.77
HAP, not included in VOM or PM	14.5
Total	227.26

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.

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