

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Caterpillar, Inc.
Attn: J. F. Dallmeyer
Building VV -- MOS 52
Mossville, Illinois 61552-0600

Application No.: 99100062

I.D. No.: 143810AAB

Applicant's Designation: E-COAT

Date Received: October 19, 1999

Subject: Electrodeposition Paint Line

Date Issued:

Operating Permit Expiration

Date:

Location: Building VV -- MOS 52, Mossville

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of electrodeposition paint line as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation of the emission source(s) included in this permit shall not begin until all associated air pollution control equipment has been constructed and is operational.

2.0 Unit Specific Conditions

2.1 Unit: Electrodeposition Paint Line
Control: None

2.1.1 Description

The electrodeposition paint line will coat diesel engines.

2.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
E-coat	Electrodeposition Paint Line	None

2.1.3 Applicability Provisions and Applicable Regulations

a. The "affected E-coat paint line" for the purpose of these unit-specific conditions, is an E-coat paint line as described in Conditions 2.1.1 and 2.1.2.

- b. The affected E-coat paint line is subject to 35 IAC Part 215, Subpart F, Coating Operations: No owner or operator of a coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material, delivered to the coating applicator:

	<u>kg/l</u>	<u>lb/gal</u>
Extreme Performance Top Coat		
Air Dried	0.52	4.3

- c. The affected E-coat paint 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, 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)].

2.1.4 Non-Applicability of Regulations of Concern

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 Part 215, Subpart K (35 IAC 215.301 or 215.302), after the date by which the coating line is required to meet 35 IAC 215.204 [35 IAC 215.209].

2.1.5 Control Requirements

None

2.1.6 Emission Limitations

- a. Emissions from the affected E-coat paint line shall not exceed the following limits:

	VOM Emissions	
<u>(Ton/Month)</u>		<u>(Ton/Year)</u>
9.8		97.7

These limits are based on the maximum material usage and the compliance procedures specified in Condition 2.1.12.

- b. Emissions from the solvent based coating lines shall not exceed the following limits:

VOM Emissions	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
8.6	85.6

These limits are based on the maximum material usage and the compliance procedures specified in condition 2.1.12. The annual limit represents an emission decrease of 67.1 tons/year. This decrease is based upon the source having an average two year baseline emission of 152.7 tons/year for VOM emissions contributed by painting from the enamel building BB and DD.

- 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 source has addressed the applicability and compliance of 40 CFR 52.21, Prevention of Significant Deterioration (PSD) (See Attachment 1). These limits continue to ensure that the construction and/or modification addressed in this construction permit does not constitute a new major source or major modification pursuant to these rules.

2.1.7 Testing Requirements

- a. The VOM content of coatings shall be determined by Method 24, 40 CFR Part 60, Appendix A, incorporated by reference in 35 IAC 215.105 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 incorporated by reference in 35 IAC 215.105. 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)].

2.1.1.8 Monitoring Requirements

None

2.1.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected E-coat paint line and the solvent based coating lines to demonstrate compliance with condition 2.1.6:

- a. Amount of each material used (gallons/month and gallons/year);
- b. VOM content of each material used (lb VOM/gallon); and
- c. VOM emissions (tons/month and tons/year).

2.1.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance of the affected E-coat paint line with the permit requirements as follows. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of VOM in excess of the limits specified in condition 2.1.6.

2.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected can 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 E-coat paint line, provided that the Permittee continues to comply with the conditions of this permit.

2.1.12 Compliance Procedures

- a. Compliance with Condition 2.1.3(b) shall be based on the recordkeeping requirements in Condition 2.1.9 and the testing requirements in Condition 2.1.7.
- b. Compliance with Condition 2.1.3(c) is assumed to be achieved by the work-practices inherent in operation of an affected E-coat paint line.
- c. Compliance with the emission limits established in condition 2.1.6 shall be based on the recordkeeping requirements in Condition 2.1.9 and the emission factors and formulas listed below:

To determine compliance with Condition 2.1.6, VOM emissions from the affected E-coat paint line shall be calculated based on the following:

VOM Emissions (tons) = (Material Usage, gallons) x (VOM Content of Material, lb VOM/gallon)

Please note that this permit is issued for the construction (and operation) of the equipment listed above. The Permittee should update their CAAPP application to include this new equipment by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information to accomplish this.

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If you have any questions on this, please call Jason Schnepf at 217/782-2113.

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

DES:JMS:jar

cc: Region 3

Attachment 1

PSD Applicability

Contemporaneous Time Period of June, 1995 Through June, 2000

Table I - Emissions Increases Associated With The Proposed Modification

<u>Item of Equipment</u>	<u>Installation Date</u>	Permitted VOM Emissions (Tons/Year)	Permit Number
E-coat Paint Line	June, 2000	97.7	99100062

Table II - Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Removal Date</u>	VOM* Emissions (Tons/Year)	Permit Number
Solvent Based Coating Lines	N/A	67.1	99100062

Table III - Source-Wide Creditable Contemporaneous Emission Increases

<u>Item of Equipment</u>	<u>Operational Date</u>	Permitted VOM Emissions (Tons/Year)	Permit Number
None			

Table IV - Net Emissions Change

	VOM (Tons/Year)
Increases Associated With The Proposed Modification	97.7
Creditable Contemporaneous Emission Decreases	- 67.1
Creditable Contemporaneous Emission Increases	<u>0.00</u>
	30.6

* Past actual emissions are based on an average of the actual emissions from the previous two calendar years prior to the emission decrease.

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