

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF AIR

DIVISION of AIR POLLUTION CONTROL

PERMIT SECTION

PROJECT SUMMARY for the
DRAFT CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Rohm and Haas-Lansing Facility
2701 and 3000 East 170th Street
Lansing, Illinois 60438

Illinois EPA ID Number: 31159AAQ

Application Number: 96030188

Application Type: CAAPP Renewal

Start of Public Comment Period: September 7, 2006

Close of Public Comment Period: October 7, 2006

Permit Engineer/Technical Contact: Dan Punzak, P.E., 217/782-2113

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(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

I. INTRODUCTION

This source has applied for a renewal of its Clean Air Act Permit Program (CAAPP) operating permit. The CAAPP is the program established in Illinois for operating permits for significant stationary sources as required by Title V of the federal Clean Air Act and Section 39.5 of Illinois' Environmental Protection Act. The conditions in a CAAPP permit are enforceable by the Illinois Environmental Protection Agency (Illinois EPA), the USEPA, and the public. This document is for informational purposes only and does not shield the Permittee from enforcement actions or its responsibility to comply with applicable regulations. This document shall not constitute a defense to a violation of the Act or any rule or regulation.

A CAAPP permit contains conditions identifying the applicable state and federal air pollution control requirements that apply to a source. The permit also establishes emission limits, appropriate compliance procedures, and specific operational flexibility. The appropriate compliance procedures may include monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the source is operating in accordance with the requirements of the permit. Further explanations of the specific provisions of the draft CAAPP permit are contained in the attachments to this document, which also identify the various emission units at the source.

II. GENERAL SOURCE DESCRIPTION

a. Nature of source

Rohm and Haas-Lansing Facility is located at 2701 and 3000 East 170th Street, Lansing in Cook County. The source conducts operations for the manufacturing of paints for the automotive industry. Production is conducted on a batch basis. The materials used in the manufacturing of the paints generally include resin, organic solvent, and solid raw materials such as pigments. The operations at the plant are divided according to source categories and/or process operations. These operations are batchmaking, dispersion, resin manufacturing, storage tanks and solvent cleaning. Batchmaking is a process for the production of finished paint and intermediate coatings. Pigment dispersion involves the grinding (milling) of pigments from its aggregate state into dispersed particle sizes. The plant also manufactures its own resin, both for internal and external use.

b. Ambient air quality status for the area

The source is located in an area that is currently designated nonattainment for the National Ambient Air Quality Standards for ozone and PM_{2.5} and attainment or

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unclassifiable for all other criteria pollutants (carbon monoxide, lead, nitrogen dioxide, PM₁₀ and sulfur dioxide).

c. Major source status

1. The source requires a CAAPP permit as a major source of VOM emissions.

d. Source Emissions

The following table lists annual emissions of criteria pollutants from this source, as reported in the Annual Emission Reports sent to the Illinois EPA.

Pollutant	Annual Emissions (tons)				
	2005	2004	2003	2002	2001
CO	0.01200	0.001000	*	*	*
NO _x	0.005700	0.006000	*	*	*
PM	0.375200	0.177000	0.380000	0.396700	0.314300
SO ₂	0.000036	0.000030	*	*	*
VOM	30.780500	31.630000	32.820000	33.335600	11.217000
Top HAP	0.945000	5.19 Methanol	9.41 Methyl Ethyl Ketone	4.41 Ethyl- benzene	*

* None reported that year

III. NEW SOURCE REVIEW/TITLE I CONDITIONS

This draft permit contains terms and conditions that address the applicability of permit programs for new and modified sources under Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the draft permit by T1, T1R, or T1N. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this draft permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them. Where the source has requested that the Illinois EPA establish new conditions or revise such conditions in a Title I permit, those conditions are consistent with the information provided in the CAAPP application and will remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

This draft permit would establish new Title I requirements. These limits came from construction permits issued since the original permit was issued.

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IV. COMPLIANCE INFORMATION

The source has certified compliance with all applicable rules and regulations; therefore, a compliance schedule is not required for this source. In addition, the draft permit requires the source to certify its compliance status on an annual basis.

V. PROPOSED ILLINOIS EPA ACTION/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 by the Illinois EPA for the draft or proposed permit, pursuant to 35 IAC Part 252 and Sections 39.5(8) and (9) of the Illinois Environmental Protection Act. A final decision on the draft or proposed permit will not be made until the public, affected states, and USEPA have had an opportunity to comment. The Illinois EPA is not required to accept recommendations that are not based on applicable requirements. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

ATTACHMENT 1: Summary of Source-Wide Requirements

The following table indicates the source-wide emissions control programs and planning requirements that are applicable to this source. These programs are addressed in Sections 5 and 6 of the draft permit.

Program/Plan	Applicable
Emissions Reduction Market System (ERMS)	Yes
Nitrogen Oxides (NO _x) Trading Program	No
Acid Rain Program	No
Compliance Assurance Monitoring (CAM) Plan	No
Fugitive Particulate Matter (PM) Operating	No
Risk Management Plan (RMP)	No
PM ₁₀ Contingency Measure Plan	No

- a. The ERMS is a market-based program designed to reduce VOM emissions from stationary sources located in the Chicago ozone non-attainment area in order to contribute to reasonable further progress toward attainment (35 IAC Part 205). If applicable, this program is further described in Section 6.0 of the draft permit, including the Illinois EPA's determination of the source's baseline emissions and allotment of trading units under the ERMS.

ATTACHMENT 2: Summary of Requirements for Specific Emission Units

The following tables include information on the requirements that apply to significant emission units at this source. The requirements are found in Section 7 of the draft permit, which is further divided into subsection, i.e., Section 7.1, 7.2, etc., for the different categories of units at the source. A separate table is provided for each subsection in Section 7 of the draft permit. An explanation of acronyms and abbreviations is contained in Section 2 of the draft permit.

Table 1 (Section 7.1 of the draft permit)

Emission Unit – Batchmaking, Filling Operations, Dispersion Production and Water-Base Paint Manufacturing	
Description	Units that emit PM or are vented to the thermal oxidizer
Date Constructed	Most before 1970 except water-base in the 1990s
Emission Control Equipment	Baghouses, many of which are for employee health or the equipment is indoors
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC PM rules such as 212.321 or 212.322 • 35 IAC VOM rules under 218 Subpart AA
Streamlining	
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Condition 7.1.6. These limits were incorporated from Permits 90100097, 96020036, 99020072, 99060079, 00070019 and 00100034.
Non-applicability	<ul style="list-style-type: none"> • The affected units vented to baghouses are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected units do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.
Periodic Monitoring (other than basic regulatory requirements)	
Testing	

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Emission Unit – Batchmaking, Filling Operations, Dispersion Production and Water-Base Paint Manufacturing	
Emissions Monitoring	The baghouses are primarily for employee health rather than compliance with air regulations so monitoring is not required. Manufacturer’s recommended practices for bag replacement and maintenance of the baghouses shall be followed.
Operational Monitoring	
Inspections	Inspections for pump leaks
Recordkeeping	Production and maintenance of equipment
Other	
Reporting	
Prompt Reporting	Primarily of individual production and emission limits
Other Reporting	
Other Information	
Footnotes	

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Table 2 (Section 7.1 of the draft permit)

Emission Unit – Units vented to the Thermal Oxidizer	
Description	Some of the Storage Tanks (primarily those containing HAPs), and the cleanup operations and the emulsifier system are vented to a thermal oxidizer
Date Constructed	Various
Emission Control Equipment	Thermal Oxidizer
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 218.301 or 218.302 • 35 IAC 218 Subpart AA
Streamlining	
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Condition 7.1.6. These limits were incorporated from Permit 85050025, 86120013, 92070049, 93050081, 93090022, 96120075, and 98070046.
Non-applicability	<ul style="list-style-type: none"> • In the original CAAPP permit this source was considered a major source of HAPs. With a general reduction in use of HAPs and more equipment vented to the thermal oxidizer, the source is now a minor source of HAPs.
Periodic Monitoring (other than basic regulatory requirements)	
Testing	
Emissions Monitoring	
Operational Monitoring	The thermal oxidizer is monitored by a thermocouple in the combustion chamber.
Inspections	
Recordkeeping	Combustion chamber temperature as required by CAM
Other	
Reporting	
Prompt Reporting	As required by CAM
Other Reporting	Exceedance of emission limitations
Other Information	

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Emission Unit – Units vented to the Thermal Oxidizer	
Footnotes	

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Table 3 (Section 7.2 of the draft permit)

Emission Unit – Resin Production	
Description	Five reactor systems
Date Constructed	1982-1992
Emission Control Equipment	Thermal oxidizer (same unit as listed in Table 2)
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 218 Subpart G • 35 IAC 218 Subpart RR, Miscellaneous Organic Chemical Manufacturing
Streamlining	
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Condition 7.1.6. These limits were incorporated from Permit 82020073, 85050053, 86100061, 90090032.
Non-applicability	<ul style="list-style-type: none"> • The affected reactor systems are not subject to the requirements of 35 IAC 218 Subpart Q, Leaks from Synthetic Organic Chemical and Polymer Manufacturing Plants, pursuant to 35 IAC 218.421 because these components are not used to manufacture the synthetic organic chemicals or polymers listed in Appendix A of 35 IAC Part 218. • The affected reactor systems used in the manufacturing of polyester resin are not subject to the requirements of 35 IAC 218 Subpart CC, Polyester Resin Product Manufacturing Process, because these reactor systems are not polyester resin products manufacturing processes as that term is defined in 35 IAC 211.4850. • The affected reactor systems are not subject to the requirements of 35 IAC 218 Subpart V, Batch Operations, pursuant to 35 IAC 218.500 because this source does not have a standard industrial classification (SIC) code listed in 35 IAC 218.500(a)(1).
Periodic Monitoring (other than basic regulatory requirements)	
Testing	35 IAC 218 105
Emissions Monitoring	This is the same control device as discussed in Table 2.

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Emission Unit – Resin Production	
Operational Monitoring	Leak detection requirements of 35 IAC 218.105(g)
Inspections	Periodic inspection and repair of control equipment
Recordkeeping	Combustion chamber temperature as required monitoring. Leak detection results.
Other	
Reporting	
Prompt Reporting	Exceedance of emission limitations
Other Reporting	Any malfunction of the thermal oxidizer.
Other Information	
Footnotes	

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Table 4 (Section 7.6 of the draft permit)

Emission Unit – Spray Booth Laboratory	
Description	Quality testing laboratory for manufactured coatings
Date Constructed	2002
Emission Control Equipment	Filters
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 218.301
Streamlining	<ul style="list-style-type: none"> • Low coating usage assures compliance with PM rules
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Condition 7.1.6. These limits were incorporated from Permit 02110010.
Non-applicability	<ul style="list-style-type: none"> • NSPS for coating of business machines: 40 CFR 60 subpart TTT
Periodic Monitoring (other than basic regulatory requirements)	
Testing	
Emissions Monitoring	
Operational Monitoring	
Inspections	
Recordkeeping	
Other	
Reporting	
Prompt Reporting	Exceedance of emissions limitations
Other Reporting	
Other Information	
Footnotes	

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