

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD **RECEIVED**
CLERK'S OFFICE

ROHM AND HAAS COMPANY)
)
 Petitioner,)
)
 v.)
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)
)
)
)

MAR 11 2005
STATE OF ILLINOIS
Pollution Control Board

PCB 05--164
FESOP Permit Appeal

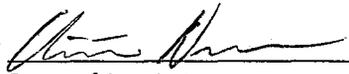
NOTICE OF FILING

Division of Legal Counsel
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Ms. Dorothy Gunn, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph - Suite 11-500
Chicago, Illinois 60601

Please take notice that on March 11, 2005, the undersigned caused to be filed with the Clerk of the Illinois Pollution Control Board, Petitioner's Petition for Review and Appearance, copies of which are herewith served upon you.

Rohm and Haas Company

By  _____
One of its Attorneys

A. Bruce White
Christopher W. Newcomb
Karaganis, White & Magel, Ltd.
414 North Orleans Street, Suite 810
Chicago, Illinois 60610
(312) 836-1177

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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Pollution Control Board

ROHM AND HAAS COMPANY)

Petitioner,)

v.)

ILLINOIS ENVIRONMENTAL)
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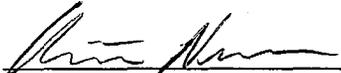
Respondent.)

PCB 05--164
FESOP Permit Appeal

APPEARANCE

NOW COMES Bruce White and Christopher Newcomb of the law firm of Karaganis, White & Magel, Ltd., and hereby enter their appearance on behalf of the Petitioner ROHM AND HAAS COMPANY, in the above-referenced matter.

Rohm and Haas Company

By 
One of its Attorneys

A. Bruce White
Christopher W. Newcomb
Karaganis, White & Magel, Ltd.
414 North Orleans Street, Suite 810
Chicago, Illinois 60610
(312) 836-1177

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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MAR 11 2005

STATE OF ILLINOIS
Pollution Control Board

ROHM AND HAAS COMPANY,)
)
 Petitioner,)
)
 v.)
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)
)
)
)

PCB 05-1164
FESOP Permit Appeal

PETITION FOR REVIEW

NOW COMES Petitioner, Rohm and Haas Company (Rohm and Haas or Petitioner), pursuant to Section 40(a)(1) of the Illinois Environmental Protection Act (Act), 415 ILCS § 5/40(a)(1), and 35 Ill. Adm. Code Part 105, by its attorneys, Karaganis, White and Magel, Ltd., and appeals the Illinois Environmental Protection Agency's (Illinois EPA's) final decision of the issuance of the Federally Enforceable State operating Permit -- Renewal (FESOP Renewal) and the conditions contained therein. In support of this Petition, Rohm and Haas states:

1. Rohm and Haas is the owner and operator of a polymer emulsion manufacturing plant located at 1400 Harvard Drive, Kankakee, Illinois (the Plant). Kankakee County is designated as an attainment area for all criteria air pollutants, and the Plant is a minor source for all pollutants -- VOM, HAPs (both collectively and individual), PM, NOx and CO.

2. Under the Plant's previous FESOP -- #8906066 issued by Illinois EPA on January 10, 2000 and expired on January 10, 2005 -- the Plant's emission limits were 58

tpy VOM; 14.56 tpy PM; 8.5 tpy NO_x; and 7.14 tpy CO, based upon the continuous operation of the Plant 24 hours and day, seven days a week for the entire year (8,760 hrs/yr operation). (A copy of the previous FESOP is attached hereto as Exhibit 1.) Historically, the Plant has consistently emitted well below 25 tpy VOM or PM, well below 10 tpy for any individual HAP, and well below 25 tpy for all HAPs.

3. On July 9, 2004, Rohm and Haas timely filed an application for renewal of the Plant's FESOP.

4. On February 7, 2005, the Illinois EPA issued the Plant a "*Federally Enforceable State Operating Permit -- Renewal*" No. 89060066 (Renewed FESOP), including several objectionable revisions from the previous FESOP. A copy of the Renewed FESOP is attached hereto as Exhibit 2.

5. Rohm and Haas specifically objects to, and hereby appeals, the following conditions contained in the Renewed FESOP on the following bases:

- a. **Conditions 2a, 2b, 19 and 20.** Conditions 2a (including all subsections i through iv), 2b, 19 and 20 purport to create enforceable permit conditions based on the Plant's participation in and/or meeting specific provisions of the federal Performance Track Program. The Performance Track Program is a voluntary program available only to those facilities recognized by the U.S. EPA as top environmental performers, *i.e.*, those who consistently meet and exceed regulatory compliance requirements to attain levels of environmental performance and management that provide greater benefits to people, communities and the environment. Whether a facility

may participate in the Performance Track Program is entirely discretionary to U.S. EPA. (69 FR 21737, 21740 (April 22, 2004).)¹

The conditions added to the Renewed FESOP are not necessary to accomplish the purposes of the Illinois Environmental Protection Act (Act), and, in fact, bear no relationship to compliance with the Act. The Performance Track Program is not a State program; is not legislated or required by the Act or any implementing regulations; nothing in the Act authorizes or requires adherence to any Performance Track Program requirement; and Performance Track is not incorporated by reference in the State Implementation Plan (SIP). In fact, Performance Track is not even federally "enforceable," as the program is voluntary (*i.e.*, a participant's nonconformance to Performance Track Program provisions does not constitute a violation of the Clean Air Act or its implementing regulations). Illinois EPA simply has no legal authority to require participation in, or adherence to any provision of, the federal Performance Track Program, and therefore cannot include as conditions of a FESOP either the participation in, or conformity to, the Performance Track Program. As such, none of the conditions premised even in part on the

¹ Rohm and Haas notes that during the course of discussions with Illinois EPA during the draft permit comment period, Rohm and Haas had conditionally agreed to accept the reference to Performance Track whereby Condition 2a would state that its issuance was based on the Plant's continued participation in the Performance Track program. This concession was conditioned upon the Illinois EPA's deletion of all the remaining references to Performance Track in the final FESOP. The Illinois EPA chose not to delete the additional objectionable references/conditions, so the Plant is appealing inclusion of any and all conditions that attempt to transform the voluntary Performance Track provisions into mandatory permit conditions in the Renewed FESOP.

Performance Track program are necessary to accomplish the purposes of the Act.

Moreover, these conditions conflict with Section 9.1(a) of the Act.² Performance Track attempts to create a scheme by which overcomplying facilities are rewarded with some additional degree of flexibility and regulatory relief. The conditions at issue here undermine the stated goals of the federal Performance Track Program. For example, by requiring the Plant to submit a signed certification of the Plant's continued participation in the Performance Track system, and submit a copy of the preceding year's Annual Performance Report (Renewed FESOP Conditions 19 and 20), the Illinois EPA is creating duplicative requirements and increasing the regulatory burden on the Plant. This stands in stark contrast to the stated goal of the Performance Track Program -- to reduce regulatory burdens on facilities that consistently exceed their compliance obligations.

Additionally, the Renewed FESOP conditions create an unworkable and unpredictable set of conditions that potentially subject the Plant to arbitrary enforcement. For example, Condition 2a(i) requires "compliance with . . . [p]rovisions of the Environmental Management System." The function of the Environmental Management System (EMS) is to internally

² Section 9.1 of the Illinois Environmental Protection Act, "State and federal cooperation; regulations; permit," states that "it is the purpose of this Section to avoid the existence of duplicative, overlapping or conflicting State and federal regulatory systems." Conditions 2a (including all subsections 1 through iv), 2b, 19 and 20 to the FESOP Renewal create a permit scheme imposing requirements on a Performance Track facility that are duplicative, overlapping and conflict with the goals of the federal Performance Track program.

assess process systems, identify problem areas and propose methods to further improve those processes (an ongoing system of improvements that is not required by the Act), even if the processes are in compliance with all regulatory requirements. Under the scheme devised by the Illinois EPA and incorporated into the Renewed FESOP, if the Plant chose not to pursue implementing certain improvements identified by EMS -- no matter what the reason -- the Illinois EPA could allege "noncompliance" with Condition 2a(i), thus creating a permit violation out of a situation where the Plant was already overcomplying. This unworkable scheme would subject the Plant to arbitrary enforcement of requirements that bear no relationship whatsoever to accomplishing the purposes of the Act.

Condition 2b purports to assert that in the event the Plant terminates participation in the Performance Track Program, the Plant would have to apply for a CAAPP permit. There is no basis under the Act for such a result -- as stated before, nothing in the Act requires participation in Performance Track. Moreover, there is no rational relationship between participation in Performance Track and any federally enforceable emissions limitations that bears upon whether the facility meets CAAPP permit thresholds. As such, any reference whatsoever to the Plant's participation in, or need to meet any provision of, the federal Performance Track Program is unnecessary to accomplish the purposes of the Act.

Finally, Rohm and Haas affirms that applicable environmental laws would not be violated if the previous FESOP permit was renewed without revision. As such, conditions 2a (including subsections i through iv), 2b, 19 and 20 must be stricken.

- b. **Condition 7a.** Illinois EPA's condition 7a purports to require the Plant to preheat the afterburner combustion chamber "to the temperature no less than the temperature at which compliance was demonstrated during the compliance stack test before operation of the process equipment ducted to the afterburner is begun." According to the manufacturer's recommended operating procedures, and as was acceptable over the life of the Plant's FESOP permits since 1994, required destruction efficiency of the afterburner is achieved when the temperature of the afterburner combustion chamber is anywhere *in the range between* 1500 and 1600 degrees F. (See. *e.g.*, Condition 6a of Plant's previous FESOP.) Revised Condition 7a bears no rational relationship to emission control efficiency or with enhancing protection of human health and the environment -- there is no evidence that the destruction efficiency requirement is not being met while the afterburner operates anywhere between recommended 1500 and the 1568 degrees F at which compliance was previously demonstrated. (Complying destruction efficiency is 99.9%.)³

³ Moreover, this revised condition would require the Plant to unnecessarily burn additional natural gas and generate additional emissions to meet the increased temperature requirement, a result that is inconsistent with purposes of the Act -- to reduce emissions.

As such, Condition 7a of the Renewed FESOP is both unnecessary to accomplish the purposes of the Act, and applicable environmental laws would not be violated if the previous FESOP permit was renewed without revision.

6. During the public comment period, Rohm and Haas raised its objections to the conditions that Rohm and Haas now appeals. On October 27, 2004, the Illinois EPA issued for public comment a draft FESOP Renewal. On November 15, 2004, Rohm and Haas provided its comments on the draft FESOP Renewal, specifically objecting to, *inter alia*, the conditions now being appealed.

7. The current appeal is being timely filed -- within the 35-day appeal deadline period prescribed by 415 ILCS §5/40(a)(1).

WHEREFORE, Rohm and Haas requests that the Board conduct a hearing and vacate conditions 2a (including subsection 1 through iv), 2b, 7a, 19 and 20, direct the Illinois EPA issue the Plant a FESOP permit equivalent to the Plant's previous FESOP that expired on January 10, 2005 without further undue delay, and for such other relief as the Board deems appropriate.

Respectfully submitted,

ROHM AND HAAS COMPANY



One of its attorneys

Bruce White
Christopher Newcomb
Karaganis, White and Magel, Ltd.
414 N. Orleans Street, Suite 810
Chicago, Illinois 60610
(312) 836-1177

EXHIBIT 1

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
RENEWAL

PERMITTEE

Rohm and Haas Company
Attn: Craig Rosenow
1400 Harvard Drive
Kankakee, Illinois 60901

Application No.: 89060066 I.D. No.: 091055AEI
Applicant's Designation: POLYMER Date Received: July 14, 1999
Subject: R-1 AND R-4 Process Lines
Date Issued: January 10, 2000 Expiration Date: January 10, 2005
Location: 1400 Harvard Drive, Kankakee

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of a polymer emulsion manufacturing plant including: raw material, product and waste storage tanks, afterburner and flare, cooling tower, natural gas fired boilers, and pneumatic solids transfer system for wastewater treatment chemicals pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 10 tons per year of any single HAP, 25 tons per year of total HAPs, and 100 tons per year of VOM). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
 - c. This permit supersedes all operating permits issued for this location.
2. Emissions of volatile organic material (VOM) shall not exceed the following:

	VOM Emissions	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Process, Primarily Filters	1.8	18.0
Wastewater Treatment	2.0	20.0
Fugitive	<u>2.0</u>	<u>20.0</u>
Total	5.8	58.0

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

3. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 4a. The following equipment shall be vented to the afterburner through a vent header, except as allowed pursuant to Condition 4b. The afterburner shall be operated to provide 99.9% destruction efficiency for VOM as previously demonstrated by an emissions test.

Pre-Emulsion Tanks
Reactors
Drop Tanks
Mercaptan Tank

- b. In the event of malfunction or breakdown, maintenance or inspection of the afterburner, the emissions shall be ducted to a flare. The total time for ducting to the flare during malfunction and breakdown of the afterburner shall not exceed 30 days per year.
- 5a. Operation in excess of the applicable emission standards during malfunction and breakdown of both the afterburner and the flare is allowed. In this case, the Permittee will be allowed to bring any batch started before the malfunction or breakdown to completion. This condition supersedes Standard Condition No. 9(a) as it applies to malfunction or breakdown. The Permittee shall maintain the records required by Standard Condition 9(b).
- b. In the case of a malfunction or breakdown of both the flare and the afterburner, no new batches shall be started until one of the two pollution control devices is back online.
- c. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns. Within five (5) working days of such occurrence the Permittee shall give a written follow-up notice providing an explanation of the occurrence, the length of time during which operation continued under such conditions, measures taken by the Permittee to minimize excess emissions and correct deficiencies, and when normal operation resumed.

- 6a. The afterburner combustion chamber shall be preheated to the manufacturer's recommended temperature but not lower than 1500 degrees F, before operation of the process equipment ducted to the afterburner is begun.
- b. The afterburner shall be equipped with a continuous temperature monitoring device which is operational at all times the afterburner is in use. This device shall monitor the afterburner stack temperature, and will be maintained in a safe and operational condition whenever emissions are ducted to the afterburner.
- 7. The flare shall be operated to comply with applicable requirements of 40 CFR 60.18(c), (d), (e) and (f).
- 8. The raw material storage tanks shall be equipped with vapor balance lines and conservation vents.
- 9. The cooling tower shall not use chromium compounds as a biocide.
- 10a. Emissions of particular matter (PM), nitrogen oxides (NO_x) and carbon monoxide (CO) from the utilities shall not exceed the following. The annual limits are based on 8,760 hr/yr of operation.

<u>Item of Equipment</u>	<u>Firing Rate</u> (mmBtu/Hr)	<u>E M I S S I O N S</u>					
		<u>PM</u>		<u>NO_x</u>		<u>CO</u>	
		<u>(Lb/Hr)</u>	<u>(T/Yr)</u>	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>
Boilers (2)	19.8 (each)	0.15	0.65	1.94	8.50	1.63	7.14
Cooling Tower ^a	----	3.2	13.81	---	----	-	---
Pneumatic Transfer	----	0.1	0.1	---	----	-	---

^a Based on 6000 gal/min flow rate and 0.1% drift

- b. Cooling water throughout shall not exceed 6000 gal/min.
- 11. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:
 - a. Date and duration of malfunction or breakdown;
 - b. A full and detailed explanation of the cause for such emissions;
 - c. The contaminants emitted and an estimate of the quantity of emissions;
 - d. The measures used to reduce the quantity of emissions and the duration of the occurrence; and

e. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

12a. In addition, the Permittee shall maintain monthly records of the following items:

i. The number of batches produced on all lines;

ii. Emissions of VOM and HAPs including emission factors used in calculations and any methods used to determine those emission factors (ton/month and ton/year).

b. The Permittee shall calculate VOC and HAP emissions to determine compliance with Condition 3 using the following methods:

The total process emissions are calculated by summing the individual process equipment emissions each month and summing these emissions with the previous 11 months. The individual equipment emission rates are calculated by multiplying the actual total number of batches processed for PVA times the specific emission factor for that process. Emissions discharging to the afterburner will use a destruction efficiency of 99.9%. The emissions factors used are to be based on standard engineering calculations, mass balance or actual measured values. Basis for the emissions factors will be kept as part of the ongoing records as required in Condition 13a.

Fugitive emissions from leaks from process components are to be calculated based on the latest available monitoring data where available. In the absence of monitoring data standard SOCOMI factors are to be applied to the total component counts for that time period. Fugitive emissions from wastewater treatment are to be calculated based on a per batch emissions factor. Basis for the emissions factors will be kept as part of the ongoing records as required in Condition 12a. Annual emissions are to be calculated monthly by summing the current month's emission with the previous eleven months' emissions.

Emissions from storage tanks will be calculated using the U.S. EPA Tanks program and the associated protocols.

13. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

14. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
15. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

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

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

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

16. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:

A report of the total days the afterburner was not operating and emissions were ducted to the flare.

It should be noted that this permit has been revised to show the removal of a carbon adsorber on the vent from the reactor area. This is because the Permittee no longer uses the raw material (1, 3 butadiene) that the carbon adsorber was originally installed to control. This permit is based on the removal of this control not causing an increase in emissions of VOM and HAPs above the currently permitted levels.

Page 6

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

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

DES:NAF:psj

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from Polymer Emulsion Manufacturing Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of VOM, 25 tons per year of total HAPs, and 10 tons per year of any single HAP, at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

1. Emissions of volatile organic material (VOM) shall not exceed the following:

	VOM Emissions	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Process, Primarily Filters	1.8	18.0
Wastewater Treatment	2.0	20.0
Fugitive	<u>2.0</u>	<u>20.0</u>
Total	5.8	58.0

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

2. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 3a. Emissions of particular matter (PM), nitrogen oxides (NO_x) and carbon monoxide (CO) from the utilities shall not exceed the following. The annual limits are based on 8,760 hr/yr of operation.

<u>Item of Equipment</u>	<u>Firing Rate</u> <u>(mmBtu/Hr)</u>	E M I S S I O N S					
		<u>PM</u>		<u>NO_x</u>		<u>CO</u>	
		<u>(Lb/Hr)</u>	<u>(T/Yr)</u>	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>	<u>(Lb/Hr)</u>	<u>(T/Yr)</u>
Boilers (2)	19.8 (each)	0.15	0.65	1.94	8.50	1.63	7.14
Cooling Tower ^a	----	3.2	13.81	---	----	---	---
Pneumatic Transfer	----	0.1	0.1	---	----	---	---

^a Based on 6000 gal/min flow rate and 0.1% drift

- b. Cooling water throughout shall not exceed 6000 gal/min.

EXHIBIT 2



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

P.O. Box 19506, SPRINGFIELD, ILLINOIS 62794-9506

RENEE CIPRIANO, DIRECTOR

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Rohm and Haas Company
Attn: Craig Rosenow
1400 Harvard Drive
Kankakee, Illinois 60901

FESOP

Application No.: 89060066
Applicant's Designation: POLYMER
Subject: Polymer Production Plant
Date Issued: February 7, 2005
Location: 1400 Harvard Drive, Kankakee

I.D. No.: 091055AEI
Date Received: August 19, 2004
Expiration Date: February 7, 2010

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of a polymer emulsion manufacturing plant including: process tanks and reactors, product and waste storage tanks all controlled by afterburner and flare (stand-by), cooling tower, natural gas fired boilers, and wastewater treatment plant with pneumatic solid chemicals transfer system pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 10 tons per year of any single HAP, 25 tons per year of total HAPs, and 100 tons per year of VOM). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. This permit is issued based upon Rohm and Haas Company prior and continued participation in USEPA Performance Track Program and compliance with the following:
 - i. Provisions of Environmental Management System;
 - ii. All applicable federal and the state air pollution environmental regulations;
 - iii. Annual compliance self-audit results submitted to the USEPA;
 - iv. Annual Performance Report is submitted to the USEPA.

ROD R. BLAGOJEVICH, GOVERNOR

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- b. Upon termination of participation in the Performance Track Program the Permittee shall apply for a revision of this permit to establish federal enforceable production limits or submit an application for Clean Air Act Permit Program (CAAPP) permit.
- 3. Emissions of volatile organic material (VOM) shall not exceed the following:

	VOM Emissions	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Process, Primarily Filters	1.8	18.0
Wastewater Treatment	2.0	20.0
Fugitive	<u>2.0</u>	<u>20.0</u>
Total	5.8	58.0

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

- 4. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 5a. The following equipment shall be vented to the afterburner through a vent header, except as allowed pursuant to Condition 5b. The afterburner shall be operated to provide 99.9% destruction efficiency for VOM as previously demonstrated by an emissions test.
 - Pre-Emulsion Tanks
 - Reactors
 - Drop Tanks
 - Mercaptan Tank
- b. In the event of malfunction or breakdown, maintenance or inspection of the afterburner, the emissions shall be ducted to a flare. The total time for ducting to the flare during malfunction and breakdown of the afterburner shall not exceed 30 days per year.
- 6a. Operation in excess of the applicable emission standards during malfunction and breakdown of both the afterburner and the flare is allowed. In this case, the Permittee will be allowed to bring any batch started before the malfunction or breakdown to completion. This condition supersedes Standard Condition No. 9(a) as it applies to malfunction or breakdown. The Permittee shall maintain the records required by Standard Condition 9(b).

- b. In the case of a malfunction or breakdown of both the flare and the afterburner, no new batches shall be started until one of the two pollution control devices is back online.
- c. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours upon the occurrence of excess emissions due to malfunctions, or breakdowns. The Permittee shall comply with all reasonable and safe directives of the regional office regarding such malfunctions and breakdowns. Within five (5) working days of such occurrence the Permittee shall give a written follow-up notice providing an explanation of the occurrence, the length of time during which operation continued under such conditions, measures taken by the Permittee to minimize excess emissions and correct deficiencies, and when normal operation resumed.
- 7a. The afterburner combustion chamber shall be preheated to the temperature no less than the temperature at which compliance was demonstrated during the compliance stack test before operation of the process equipment ducted to the afterburner is begun.
- b. The afterburners shall be equipped with a continuous temperature monitoring device which is installed, calibrated, maintained, and operated according to vendor's specification at all times that the afterburner is in use. This device shall monitor the afterburner combustion chamber temperature.
- 8. The flare shall be operated to comply with applicable requirements of 40 CFR 60.18(c), (d), (e) and (f) and operational conditions specified in manufacturer's specification.
- 9. The raw material storage tanks shall be equipped with vapor balance lines and conservation vents.
- 10. The cooling tower shall not use chromium compounds as a biocide.
- 11a. Emissions of particular matter (PM) from the following equipment shall not exceed the following. The annual limits are based on 8,760 hr/yr of operation.

	PM Emissions	
	(Lbs/Hour)	(Tons/Year)
Cooling Tower ^a	3.2	13.81
Pneumatic Transfer	0.1	0.1

^a Based on 6,000 gal/min flow rate and 0.1% drift

- b. Cooling water throughout shall not exceed 6,000 gal/min.
- 12a. Emissions and natural gas consumption of the boilers, afterburner and flare shall not exceed the following limits:

<u>Material</u>	<u>(mmscf/Hr)</u>	<u>(mmscf/Yr)</u>	<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
				<u>Factor</u>	<u>(Lb/Hr)</u>	<u>(Tons/Yr)</u>
				<u>(Lb/mmscf)</u>		
Natural Gas	0.04	347	NO _x	100	4.0	17.4
			CO	84	3.4	14.6
			PM	7.6	0.3	1.3
			VOM	5.5	0.3	1.0

These limits define the potential emissions of NO_x, CO, PM, and VOM and are based on maximum fuel usage and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Natural gas shall be the only fuel used in all fuel combustion emission sources. Use of any other fuel other than natural gas requires a permit revision.
13. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:
- a. Date and duration of malfunction or breakdown;
 - b. A full and detailed explanation of the cause for such emissions;
 - c. The contaminants emitted and an estimate of the quantity of emissions;
 - d. The measures used to reduce the quantity of emissions and the duration of the occurrence; and
 - e. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
- 14a. The Permittee shall maintain monthly records of the following items:
- i. The number of batches produced on all lines;
 - ii. Emissions of VOM and individual HAPs with supporting calculations including emission factors used in calculations and any methods used to determine those emission factors (tons/month and tons/year); and
 - iii. Amount of natural gas consumed in the boilers, afterburner and flare (mmscf/month and mmscf/year).
- b. The Permittee shall calculate VOC and HAP emissions to determine compliance with Conditions 3 and 4 using the following methods:
 - i. The total process emissions are calculated by summing the individual process equipment emissions each month and summing

these emissions with the previous 11 months. The individual equipment emission rates are calculated by multiplying the actual total number of batches processed for PVA, acrylics, and styrene based polymers times the specific emission factor for that process. Emissions discharging to the afterburner will use a destruction efficiency of 99.9%. The emissions factors used are to be based on standard engineering calculations, mass balance or actual measured values. Basis for the emissions factors will be kept as part of the ongoing records as required in Condition 14a.

- ii. Fugitive emissions from leaks from process components are to be calculated based on the latest available monitoring data where available. In the absence of monitoring data standard SOCOMI factors are to be applied to the total component counts for that time period.
 - iii. Fugitive emissions from wastewater treatment are to be calculated based on a per batch emissions factor. Basis for the emissions factors will be kept as part of the ongoing records as required in Condition 14a. Annual emissions are to be calculated monthly by summing the current month's emission with the previous eleven months' emissions.
 - iv. Emissions from the storage tanks shall be calculated using equations given by AP-42 (5th edition, Section 7.1) or using the USEPA distributed TANKS program.
15. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
16. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 17a. Within 90 days of a written request from the Illinois EPA the emission of VOM and individual HAPs in the effluent stream of afterburner shall be measured by an approved testing service. These tests shall be conducted in accordance with 35 Ill. Adm. Code 215.102.

- b. Prior to conducting such a test, the Illinois EPA should be consulted to verify that the intended test method is approved and is appropriate for use in testing this equipment.
 - 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 emission unit and any control equipment will be determined.
 - d. The test shall be designed to measure both the destruction efficiency across the afterburner and the overall control efficiency provided by the combination of the capture system and afterburner (the emission units hard-piped to the afterburner may be assumed having 100% capture efficiency).
18. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

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

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

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

and one (1) copy of any documents relating to emissions performance testing shall be sent to the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Source Monitoring Unit
9511 West Harrison
Des Plaines, Illinois 60016

19. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
- A signed certification of the source's continued participation in the USEPA Performance Track Program.
20. The Permittee shall submit a copy of the preceding year's Annual Performance report for the USEPA Performance Track Program to the

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Illinois EPA Compliance Section within ten days after due date of
submittal to the USEPA.

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

DES

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

VJB RWB 2/7/2005
DES:VJB:ps]

cc: Illinois EPA, FOS Region 1
Lotus Notes

COPY
Original Signed by
Donald E. Sutton, P.E.

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from Polymer Emulsion Manufacturing Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 100 tons per year of VOM, 25 tons per year of total HAPs, and 10 tons per year of any single HAP, at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

<u>Process</u>	<u>VOM</u>	<u>E M I S S I O N S (Tons/Year)</u>			<u>Single HAP</u>	<u>Total HAP</u>
		<u>NO_x</u>	<u>CO</u>	<u>PM</u>		
Production	18.0					
Wastewater Treatment	20.0					
Fugitive	20.0					
Cooling Tower	--			13.8		
Chemicals Transfer	--			0.1		
Boilers, Afterburner, Flare	1.0	17.4	14.6	1.3		
Total	59.0	17.4	14.6	15.2	<10	<25

VJB:psj



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS
FOR
OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special permit conditions(s).

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 with applicable local laws, ordinances and regulations.
2. 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 ground for revocation under 35 Ill. Adm. Code 201.166.
3.
 - a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.
 - b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.
4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:
 - a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;
 - b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;
 - c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;
 - d. To obtain and remove samples of any discharge or emission of pollutants; and
 - e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.
5. The issuance of this permit:
 - a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

- b. 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 facilities;
 - c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and
 - d. 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 proposed equipment or facility.
6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.
 7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.
 8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. This records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.
 9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:
 - a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph, or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;
 - b. Maintain the following records for a period of no less than two (2) years:
 - i. Date and duration of malfunction, breakdown, or startup,
 - ii. Full and detailed explanation of the cause,
 - iii. Contaminants emitted and an estimate of quantity of emissions,
 - iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and
 - v. Measures taken to reduce future occurrences and frequency of incidents.
 10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.
 11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

CERTIFICATE OF SERVICE

I, the undersigned, certify that I have caused the foregoing Petition for Review and Appearance to be served in the manner indicated upon each person listed below, on this 11th day of March, 2005.

BY U.S. MAIL:

Division of Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

BY MESSENGER:

Ms. Dorothy Gunn, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph - Suite 11-500
Chicago, Illinois 60601



Christopher W. Newcomb
**Attorney for Petitioner, Rohm and Haas
Company**