

PROPOSED CAAPP PERMIT
September 12, 2007

217/782-2113

RENEWAL
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Rohm and Haas Chemicals LLC
Attn: Stan Zagula
5005 Barnard Mill Road
Ringwood, Illinois 60072-0238

I.D. No.: 111811AAB
Application No.: 96030084

Date Received: December 28, 2004
Date Issued: TBD
Expiration Date¹: TBD

Operation of: Adhesive and Chemical Specialties
Source Location: 5005 Barnard Mill Road, Ringwood, McHenry County 60072
Responsible Official: Carlos Quinones, Plant Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a latex, resins, plastics, adhesives, and ink components 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 Kaushal Desai at 217/782-2113.

Edwin C. Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

ECB:KKD:psj

cc: Illinois EPA, FOS, Region 1
CES
Lotus Notes

1 Except as provided in Conditions 1.5 and 8.7 of this permit.

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1.0 INTRODUCTION

1.1 Source Identification

Rohm and Haas Chemicals LLC
5005 Barnard Mill Road
Ringwood, Illinois 60072
815/653-2411

I.D. No.: 111811AAB
Standard Industrial Classification: 2891, Chemical and Allied Products

1.2 Owner/Parent Company

Rohm and Haas Chemicals LLC
5005 Barnard Mill Road
Ringwood, Illinois 60072
815/653-2411

1.3 Operator

Rohm and Haas Chemicals LLC
5005 Barnard Mill Road
Ringwood, Illinois 60072
815/653-2411

Carlos Quinones, Plant Manager
815-728-4602

1.4 Source Description

The Rohm and Haas Chemicals LLC is located at 5005 Barnard Mill Road in Ringwood, Illinois. This manufacturing source produces a multitude of products including latex, resins, plastics, adhesives, and ink components that are marketed to various industries. The source operates a number of chemical processes that are either batch or continuous in nature. The facility also operates combustion units for the production of steam and heat.

Note: This narrative description is for informational purposes only and is not enforceable.

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include PSD and MSSCAM, and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). These conditions continue in effect, notwithstanding the expiration date specified on the first page

of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

- a. This permit contains Title I conditions that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1."
- b. This permit contains Title I conditions that revise Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1R."

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
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
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MSSCAM	Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)
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
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

3.0 CONDITIONS FOR 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:

Waste Water Treatment Plant

Adcote Polyester Area

Ethylene Glycol Tank (TSS-104)

Polyurethane Area

Storage Tank (TSS-248)
TDI Storage Tank (TSS-103)
TDI Storage Tank (TSS-125)
Storage Tank (TSS-126)
Storage Tank (TSS-127)

Serfene Area

Transfer to Drums, Totes

K100/K110 and K154 Area

Transfer to Drums, Totes
Water Based Material Storage

Tank Farm Area

Storage Tanks (TS-47, TS-45, TS-248, TS-127B, TS-260, TSS-70, TS-112, TS-85, TSS-50, TSS-51, TS-146, TSS-236A)

Morez Solution Building 27

Holding Tank (TSS-269)

Morez Solution Building 4

Storage Tanks (TSS-94, TSS-102)

Latex/Serfene Area

Side Stream Mix Cans
Intermediate Tanks

Development Areas 28 and 44

Storage Tanks
(TSS-115, 116, 326, 327, 328, 329)

Grafted Resin Area

Product Changeover
Waste Drumming
Pellet Transfer: Truck/Silo (DC-55)
Pellet Transfer: Silo/Feeder (CN-52)
Pellet Transfer: Dryer/Classifier (CN-48)
Pellet Transfer: Classifier MI 307 (CN-43/DC-49)
Pellet Transfer: MI 307/Containers
Pellet Transfer: Containers/Wash Vessel K-166 (CN-47)

Process Development Lab

K-184

Building 30 Catalyst Room

- 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:

Adcote Polyester Production

Tank TSS-243

Grafted Resins

Polyethylene Tank/DC55 (TA-16)

Polyurethane Production

Glycol Tanks TS (162, 161, 167, 168) TSS (169, 170)

K100/K110

Gram Scale S and N
Reactor K (65, 105)
Tank (aqueous NH₃) TSS-152
Processing in K133/HX70
Processing in K132/HX99
Tank TS-155
Tank (Phosphoric)

Tank Farm

Storage Tanks TS (103, 281, 127A, 147, 61, 73, 236B)
TSS (250), TA-8, and TFG (58, 59)

Building 32A Polyester

Tanks TSS (272, 314, 315, 317, 323, 273, 270, 274, 275, 276)

Miscellaneous Sources

Tanks TSS-173, and TFG-62
Solvent Shot Tank TS-282
Product Part Cleaner Parts-INC-7

Polymer Wash Water Reduction

TS-238

- 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)].

Extruders used for the extrusion of metals, minerals, plastics, rubber, or wood, excluding extruders used in the manufacture of polymers, provided that volatile organic materials or class I or II substances subject to the requirements of Title VI of the CAA are not used as foaming agents or release agents or were not used as foaming agents in the case of extruders processing scrap material [35 IAC 201.210(a)(5)].

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)].

Equipment used for the mixing and blending of materials at ambient temperature to make water based adhesives, provided each material mixed or blended contains less than 5% organic solvent by weight [35 IAC 201.210(a)(9)].

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 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 less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)] and [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). Note: These activities are not required to be individually listed.

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 5.3.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 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 (see Attachment 2) and 35 IAC Part 266. 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.

3.2.2 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 218.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify

as photochemically reactive material as defined in 35 IAC 211.4690.

- 3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.
- 3.2.4 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70°F, the Permittee shall comply with the applicable requirements of 35 IAC 218.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.
- 3.2.5 For each emission unit required to be included in determining applicability of 35 IAC 218 Subpart RR and TT, total VOM emissions from insignificant activities (including storage and handling of formulations) in conjunction with the applicable emission units in Section 7 of this permit shall not equal or exceed 25 ton/yr.
- 3.2.6 For each organic material emission unit that is exempt from 35 IAC 218 Subpart TT, the Permittee shall maintain emissions of VOM to the atmosphere less than or equal to 2.3 Mg (2.5 tons) per calendar year. The total emissions from emission units (including insignificant and significant activities) not complying with 35 IAC 218.986 shall not exceed 4.5 Mg (5.0 tons) per calendar year.
- 3.2.7 For each organic material emission unit that is exempt from 35 IAC 218 Subpart RR, the Permittee shall maintain emissions of VOM to the atmosphere less than or equal to 0.91 Mg (1.0 tons) per calendar year. The total emissions from emission units (including insignificant and significant activities) not complying with 35 IAC 218.966 shall not exceed 4.5 Mg (5.0 tons) per calendar year.

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 Units	Date Constructed	Control Equipment ¹
Boiler #6	1976	
Boiler #7	1995	
Oil Heater	1989	
Morez Solution in Building 4	1988	
Morez Solution in Building 27	1989	
Serfene Process	1972	
Adcote Polyester Production	1974	
Grafted Resins & Resins Washing	1989	
Dye	1987	
K154	1989	
Morez Line II	1986	
Morez Line III	1989	
Polyester	1989	
Polyurethane Production	1974	
Monomer for Reaction	1976	
Development Building 28	1971	
Development Building 44	1983	
PSA Production	1974	
Polymer Wash Water Reduction Unit	1981	
Storage Tanks	1988	
Tank Farm	NA	
Egan Coater	2002	

Note:1 For the control equipment refer to Section 7 for each emission unit.

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM emissions.

5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated nonattainment for the National Ambient Air Quality Standards for ozone (moderate nonattainment) and PM_{2.5} and attainment or unclassifiable for all other criteria pollutants (CO, lead, NO₂, ozone, PM₁₀, SO₂).

5.3 Source-Wide Applicable Provisions and Regulations

5.3.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions for Specific Emission Units) of this permit.

5.3.2 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.
- b. Pursuant to 35 IAC 212.123(a), 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, except as allowed by 35 IAC 212.123(b) and 212.124.

5.3.3 Ozone Depleting Substances

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

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.3.4 Risk Management Plan (RMP)

- a. This stationary source, as defined in 40 CFR 68.3, is subject to 40 CFR Part 68, the federal regulations for Chemical Accident Prevention. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(1).
- b. The owner or operator of a stationary source shall revise and update the RMP submitted pursuant to 40 CFR 68.150, as specified in 40 CFR 68.190.

5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B 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 Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.3.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, 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 and is incorporated by reference into this permit.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.

- c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

5.4 Source-Wide Non-Applicability of Regulations of Concern

5.4.1 This source is not subject to 40 CFR Part 63, Subpart FFFF because the source is not a major source of HAPs and not subject to 40 CFR Part 63, Subpart EEEE and HHHHH because it does meet the applicability of those subparts. (See also Condition 5.6.2)

5.5 Source-Wide Control Requirements and Work Practices

Source-wide control requirements and work practices are not set for this source. However, there are requirements for unit specific control requirements and work practices set forth in Section 7 of this permit.

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable (see Section 39.5(18) of the Act).

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	130.1
Sulfur Dioxide (SO ₂)	42.0
Particulate Matter (PM)	51.2
Nitrogen Oxides (NO _x)	48.7
HAP, not included in VOM or PM	----
Total	272.0

5.6.2 Emissions of Hazardous Air Pollutants

Pursuant to Section 39.5(7)(a) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined. 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). This condition is being imposed so that the source is not a major source of HAP emissions and the requirements of 40 CFR Part 63, Subpart FFFF,

National Emission Standards for Miscellaneous Organic Chemical Manufacturing, do not apply to the source. The Permittee shall fulfill the applicable testing, recordkeeping, and reporting requirements of Conditions 5.7.2, 5.9.2, and 5.10.2.

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).

5.7 Source-Wide Testing Requirements

5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].
- b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].
- c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.7.2 HAP Testing to Verify Minor Source Status

Pursuant to Condition 5.7.1 and to verify compliance with the requirements of Condition 5.6.2, that is that this source is not a major source of HAPs, the following testing requirements are established:

- a. If in the previous calendar year, emissions of HAPs exceeded 80% of major source threshold for individual or

total HAPs (greater than 8 tons of a single HAP or greater than 20 tons of total HAPs), then testing for HAPs using USEPA Method 18 or another Illinois EPA approved method shall be conducted as follows:

Using USEPA Method 18 - Measurement of Gaseous Organic Compound Emissions by Gas Chromatography for the measurement of gaseous HAP content in exhaust stream of the affected processes that make the largest contributions to individual and total HAP emissions. The Permittee shall test the two processes that make the largest contributions to individual and total HAP emissions. If a single process accounts for more than 50% of the threshold level, only that process needs to be tested.

- b. Testing may be conducted by the supplier of the HAP-containing material.
- c. The calculation as to whether the 80% of major source threshold was exceeded shall be based on records and procedures in Condition 5.9.2 and shall be completed by January 31 for the previous calendar year. If testing is required it shall be completed by April 15.
- d. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.8 Source-Wide Monitoring Requirements

Source-wide monitoring requirements are not set for this source. However, there are provisions for unit specific monitoring set forth in Section 7 of this permit.

5.9 Source-Wide Recordkeeping Requirements

5.9.1 Annual Emission Records

The Permittee shall maintain records of total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act.

5.9.2 Records for HAP Emissions

- a. The Permittee shall maintain records of individual and combined HAP emissions on a monthly and annual basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.2, pursuant to Section 39.5(7)(b) of the Act.

- b. If testing is required by Condition 5.7.2, the Permittee shall keep records of the testing, including the test date, conditions, methodologies, calculations, test results, and any discrepancies between the test results and formulation specifications of Condition 5.9.2(c) below.
- c. The Permittee shall keep an MSDS or equivalent document showing the formulation of each coating applied on a coating line, including content of all HAPs. These formulation sheets may be used to make the calculation of HAP emissions required by Condition 5.7.2. If the formulation sheet uses a maximum or range value (e.g., less than 1% or range of 2 - 3%) then the highest value shall be used.
- d. The Permittee shall keep a record of the applicability determination for 40 CFR 63, Subpart FFFF at the source for a period of five years after the determination. This determination shall include a detailed analysis that demonstrates why the Permittee believes the source is not subject to 40 CFR 63, Subpart FFFF [40 CFR 63.10(b)(3)].

5.9.3 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.

5.10 Source-Wide Reporting Requirements

5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, 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. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

5.10.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information, including HAP emissions, for the previous calendar year.

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Source-wide operational flexibility is not set for this source. However, there are provisions for unit specific operational flexibility set forth in Section 7 of this permit.

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be addressed by the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

6.1 Emissions Reduction Market System (ERMS)

6.1.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

6.1.2 Applicability

This source is considered a "participating source" for purposes of the ERMS, 35 IAC Part 205.

6.1.3 Obligation to Hold Allotment Trading Units (ATUs)

- a. Pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, and as further addressed by Condition 6.1.8, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 6.1.5.
 - i. VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit, in accordance with 35 IAC 205.220;
 - ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit as authorized in Section 7.0 of this permit, in accordance with 35 IAC 205.225;
 - iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3);
 - iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 IAC 205.750; and
 - v. VOM emissions from certain new and modified emission units as addressed by Condition 6.1.8(b), if applicable, in accordance with 35 IAC 205.320(f).
- b. Notwithstanding the above condition, in accordance with 35 IAC 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 IAC Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions in Section 7.0 of this permit.

6.1.4 Market Transactions

- a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any market transactions, as specified at 35 IAC 205.610(a).
- b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 IAC 205.610(b).

- c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 IAC 205.620(a).
- d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 IAC 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

6.1.5 Emissions Excursion Compensation

Pursuant to 35 IAC 205.720, if the source fails to hold ATUs in accordance with Condition 6.1.3, it shall provide emissions excursion compensation in accordance with the following:

- a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:
 - i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or
 - ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.
- b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.
- c. Pursuant to 35 IAC 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source's next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

6.1.6 Quantification of Seasonal VOM Emissions

- a. The methods and procedures specified in Sections 5 and 7 of this permit for determining VOM emissions and compliance with VOM emission limitations shall be used for determining seasonal VOM emissions for purposes of the ERMS, with the following exceptions [35 IAC 205.315(b)]:

No exceptions

- b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 IAC 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 IAC 205.750(a), and shall be submitted in accordance with the following:
 - i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and
 - ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.

6.1.7 Annual Account Reporting

- a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 IAC 205.300]:
 - i. Actual seasonal emissions of VOM from the source;
 - ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;
 - iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 IAC 205.337;
 - iv. If a source has experienced an emergency, as provided in 35 IAC 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;
 - v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 IAC 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3); and
 - vi. If a source is operating a new or modified emission unit for which three years of operational data is not

yet available, as specified in 35 IAC 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.

- b. This report shall be submitted by November 30th of each year, for the preceding seasonal allotment period.

6.1.8 Allotment of ATUs to the Source

- a.
 - i. The allotment of ATUs to this source is 464 ATUs per seasonal allotment period.
 - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 52.55 tons per season.
 - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.1.10 of this permit.
 - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.

- b. Contingent Allotments for New or Modified Emission Units

None

- c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 IAC Part 205, including:
 - i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;
 - ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 IAC 205.720; and
 - iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

6.1.9 Recordkeeping for ERMS

The Permittee shall maintain copies of the following documents as its Compliance Master File for purposes of the ERMS [35 IAC 205.700(a)]:

- a. Seasonal component of the Annual Emissions Report;
- b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.1.6(a); and
- c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

6.1.10 Exclusions from Further Reductions

- a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 205.405(a)]:
 - i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;
 - ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and
 - iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 IAC 205.405(a) and (c)]:

Boiler No. 6, Boiler No. 7, and Oil Heater

- b. VOM emissions from emission units using BAT for controlling VOM emissions shall not be subject to the VOM emissions reductions requirement specified in 35 IAC 205.400(c) or (e) as long as such emission unit continues to use such BAT [35 IAC 205.405(b)].

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because these emission units use BAT for controlling VOM emissions as indicated above [35 IAC 205.405(b) and (c)]:

None

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Group 1: Boilers

7.1.1 Description

Natural gas fired boilers are used to produce steam for processes and building heat. The boilers are also able to fire distillate fuel oil (#2) as a back up fuel. Boiler # 7 is a new boiler constructed 1995. The oil heater is used to heat oil for process heating.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Equipment	Description	Emission Control Equipment
Group 1	Boiler No. 7	Natural Gas-Fired Boiler (Distillate Oil Back), Maximum Heat Input Capacity: Natural Gas - 50.321 mmBtu/hr Distillate Oil - 48.73 mmBtu/hr	Low NO _x Burner
	Boiler No. 6	Natural Gas-Fired Boiler (Distillate Oil Backup). Maximum Heat Input Capacity: Natural Gas - 30.90 mmBtu/hr Distillate Oil - 29.91 mmBtu/hr	None
	Oil Heater OH	Natural Gas-Fired Oil Heater 8.4 mmBtu/Hr Firing Rate	None

7.1.3 Applicable Provisions and Regulations

- a. i. An "affected boiler" for the purpose of these unit specific conditions are the steam generating unit that is fired with natural gas (with distillate fuel backup), with a maximum heat input capacity of 100 mmBtu/hr or less, but greater than or equal to 10 mmBtu/hr. As of the "date issued" as shown page 1 of this permit, the affected boilers are identified in Condition 7.1.2.
- ii. Boiler #7 is subject to the USEPA's Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc because it was constructed or modified after June 9, 1989.

- b. The emissions of particulate matter (PM) into the atmosphere in any one-hour period for each affected boiler shall not exceed 0.15 kg/MW-hr (0.10 lb/mmBtu) of actual heat input when using liquid fuel exclusively. [35 IAC 212.206]
- c. The emission of carbon monoxide (CO) into the atmosphere from each affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air. [35 IAC 216.121]
- d. The emission of sulfur dioxide (SO₂) into the atmosphere in any one hour period from each affected boiler from burning liquid fuel shall not exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input from distillate fuel oil (0.3 lb/mmBtu) [35 IAC 214.161(b)]. Demonstration of compliance with the fuel sulfur content restrictions in condition 7.1.5.c also demonstrates compliance with condition 7.1.3.d.
- e. Pursuant to the New Source Performance Standard, the emission of sulfur dioxide (SO₂) into the atmosphere from any one hour period from affected boiler #7 burning liquid fuel shall not exceed 0.77 kg of sulfur dioxide per MW-hr of actual heat input (0.5 lb/mmBtu); as an alternative the Permittee shall not combust oil in affected boilers that contains greater than 0.5 weight percent sulfur. All limits shall be based on a 30-day rolling average. [40 CFR 60.42c(d) and (g)]
- f. Pursuant to the New Source Performance Standard, the emission of gases into the atmosphere from the affected boiler #7, except during periods of startup, malfunction and breakdown, shall not exhibit an opacity greater than 20 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43cI]
- g. Each affected boiler is also subject to the opacity limits identified in Condition 5.2.2(b).

7.1.4 Non-Applicability of Regulations of Concern

- a. Each affected boiler is not subject to 35 IAC 217.141, because the actual heat input of the affected boiler is less than 73.2 MW (250 mmBtu/hr).
- b. Pursuant to 35 IAC 218.303, each affected boiler, i.e., fuel combustion emission unit, is not subject to 35 IAC 218.301, Use of Organic Material.
- c. There are no applicable requirements for particulate matter or sulfur dioxide for affected boilers firing natural gas.

- d. This permit is issued based on affected boiler #6 not being subject to the NSPS, 40 CFR 60 Subpart Dc, because it was constructed prior to June 9, 1989 and has not been constructed, modified or reconstructed after this date.
- e. The affected boilers are not subject to 40 CFR Part 63, Subpart DDDDD, because the facility has taken limits to keep HAP emissions below major threshold levels.

7.1.5 Control Requirements and Work Practices

- a. Each affected boiler shall only be fired by natural gas or distillate fuel oil as the fuels.
- b. The Permittee shall follow good operating practices for firing of oil, including periodic inspection of oil burners and prompt repair of defects.
- c. The Permittee shall not use distillate fuel oil (Grade No 2 fuels) in the affected boilers with a sulfur content greater than the larger of the following two values:
 - i. 0.30 weight percent, or
 - ii. The Wt percent given by the formula: Maximum Weight percent sulfur = $(0.000015) \times (\text{Gross heating value of oil, Btu/lb})$.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5.1, the affected boilers are subject to the following:

- a. Emissions of NO_x and SO₂ from the affected Boiler #7 shall not exceed 8.53 and 2.47 ton/month, and 8.53 and 2.67 ton/yr, respectively.

The above limitations contain revisions to previously issued Permit 95040006. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically MSSCAM and/or PSD. These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate

information for the source. Specifically, they allow more flexibility in operating the boiler. [T1R].

- b. 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.

7.1.7 Testing Requirements

Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurement of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and 35 IAC 212.109, so as to demonstrate compliance with the emission limits in Condition 7.1.3(f) and (g). The Permittee shall keep records of any such observations and promptly report the result to the Illinois EPA within 30 days.

7.1.8 Monitoring Requirements

Monitoring requirements are not set for the affected boilers.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with Conditions 5.6.1 and 7.1.9, pursuant to Section 39.5(7)(b) of the Act:

- a. Record addressing use of good operating practices for burning oil including:
 - i. Record of periodic inspection of the oil burners with date, individual performing the inspection, nature of inspection, and magnitude of stack opacity; and
 - ii. Records for prompt repair of defects, with identification and description of defect, date identified, date repaired, and nature of repair.
- b. For affected boilers:
 - i. Total natural gas usage for affected Boiler #7 (ft³/day); [40 CFR 60.48c(g)]
 - ii. Total distillate fuel usage for affected boiler #7 (gal/day); [40 CFR 60.48c(g)]
 - iii. The maximum sulfur content (in Wt.%) for each shipment of distillate fuel oil used in the affected boilers; and
 - iv. Fuel oil supplier certification, including:

- A. The name of the oil supplier; [40 CFR 60.48c(f)(1)(i)] and
- B. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil found at 40 CFR 60.41c. [40 CFR 60.48c(f)(1)(ii)]
- c. Annual aggregate NO_x, PM, SO₂, and VOM emissions from each affected boiler, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with applicable control and operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act. Any such notification shall include a description of the incident, the probable cause, and the corrective action or preventative measure taken:

- a. Notification within 30 days of operation of an affected boiler that may not have been compliance with the opacity limitations in Condition 5.2.2(b), with a copy of such record for each incident.
- b. If the sulfur content of a shipment of distillate fuel oil exceeds the limit, the Permittee shall submit this notification within 10 days after receipt of such shipment and the notification shall also include the amount of the shipment and its sulfur content.
- c. The Permittee shall submit a quarterly report, which shall include, in addition to the fuel supplier certification required in Condition 7.1.9(b)(iv), a certified statement signed by the Permittee that the records of fuel supplier certifications submitted represent all of the fuel consumed during the quarter. [40 CFR 60.48c(e)(11)]

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

- a. Compliance with Condition 7.1.3(b) and (c) is addressed by the work-practices in Condition 7.1.5.
- b. Compliance with Condition 7.1.3(d) and (e) is addressed by the work-practices in Condition 7.1.5, the recordkeeping requirements of condition 7.1.9, the monitoring requirements in Condition 7.1.10, and the following formula:

SO₂ Emissions (lb/mmBtu) = (2 SO₂/S) x (weight percent sulfur in the fuel)/(gross heating value of oil, mmBtu/lb).

- c. Compliance with Condition 7.1.3(f) is addressed by the work-practices in Condition 7.1.5, the recordkeeping requirements of Condition 7.1.9, and the monitoring requirements in Condition 7.1.10.
- d. Compliance with Condition 7.1.6 is addressed by the work-practices in Condition 7.1.5, the recordkeeping requirements of Condition 7.1.9, the monitoring requirements in Condition 7.1.10, and the emissions factors below:

- i. Emissions from burning natural gas shall be determined with the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emission Factor</u>	<u>Emission Factor</u>
	<u>For Boiler 06</u>	<u>For Boiler 07</u>	<u>For Oil Heater</u>
	<u>(lb/10⁶ Btu)</u>	<u>(lb/10⁶ Btu)</u>	<u>(lb/10⁶ Btu)</u>
NO _x	0.13	0.036	0.100
SO ₂	0.001	0.001	0.0006
PM	0.01	0.01	0.0076
VOM	0.016	0.016	0.0055

These emission factors based on manufacturer's guaranteed emission data for natural gas fired boilers.

Boiler Emissions (lb) = natural gas consumed multiplied by the appropriate emission factor.

- ii. Emissions from burning distillate fuel oil shall be determined with the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emission Factor</u>
	<u>For Boiler 06</u>	<u>For Boiler 07</u>
	<u>(lb/10⁶ Btu)</u>	<u>(lb/10⁶ Btu)</u>
NO _x	0.23	0.11
SO ₂	0.30	0.30
PM	0.022	0.022
VOM	0.025	0.025

These emission factors based on manufacturer's guaranteed emission data for distillate fuel oil fired boilers.

Boiler Emissions (lb) = distillate fuel oil consumed multiplied by the appropriate emission factor.

- iii. Total emissions for each pollutant are to be determined by combining the results of Conditions 7.1.12(i) and (ii) for all affected boilers.

7.2 Group 2: Morez Solution in Building 4
Morez Solution in Building 27
Serfene Process
Adcote Polyester Production
Grafted Resins and Grafted Resins Washing
K178
Former Dye Reactors
K100/K110
Morez Line II, and Morez Line III
Building 32A Polyester
Polyurethane Production
Monomer for Reaction
Development Building 28 and 44
PSA Production
K154

7.2.1 Description

Morez Solution in Building 4 Morez Solution in Building 27

This Process emission unit mixes resins, ammonia, solvents, additives, and water to form a solution. This operation is conducted in batch mode.

Serfene Process

This process emission unit uses monomers, surfactants, solvents, emulsifiers, catalysts, preservatives, water, acids and bases, buffers, and miscellaneous additives to manufacture water based emulsions. This operation is conducted in batch mode.

Adcote Polyester Production

This process emission unit uses glycols, diols, triols, polyol, acids, solvents, catalysts, water, and miscellaneous additives to manufacture polyester materials. This operation is conducted in batch mode.

K178

This emissions unit uses polyethers, polyesters, isocyanates, catalysts, stabilizers, water, and miscellaneous additives to manufacture polyester materials.

Grafted Resins and Grafted Resins Washing

This process emission unit uses polyolefins, solvents, organic anhydrides, catalysts, water, and miscellaneous additives to manufacture polyolefin-based barrier laminates and adhesives. This operation operates in both a continuous and batch mode.

Former Dye Reactors

This process emission unit produces dyes, resins, adhesives, and coating materials in small volumes for production and developmental purposes.

K100/K110 and K154

These process emission units use monomers, solvents, surfactants, emulsifiers, catalysts, preservatives, water, acids and bases, buffers, and miscellaneous additive to manufacture water based emulsions, solutions, and dispersions. These operations are conducted in batch mode.

Morez Line II ,and Morez Line III

This process emission units reacts monomers, solvents, acids, initiators, and miscellaneous additives to manufacture resins. This operation is conducted in a continuous mode.

Building 32A Polyester

This process emission unit uses diols, triols, polyols, acids and bases, catalysts, water, and miscellaneous additives to manufacture polyester materials and urethane intermediate materials. This operation is conducted in batch mode.

Polyurethane Production

This process emission unit uses polyethers, polyesters, isocyanates, solvents, catalysts, stabilizers, water, and miscellaneous additives to manufacture polyurethane materials. This operation is conducted in batch mode.

Monomer for Reaction

The system accumulates unreacted monomer streams and reacts them in a batch operation to form a waterbased latex polymer. The polymer is directed to the wash water system.

Development Building 28 and 44

This process emission unit uses a variety of organic and inorganic materials to produce small volumes of various production and developmental products.

PSA Production

This process emission unit uses monomers, solvents, initiators, cross linkers, polyethers, water, and miscellaneous additives to manufacture adhesives. This operation is conducted in batch mode.

K88/K133/K132

These process emission units use resins, waxes, solvents, ammonia, acids, bases, surfactants, and miscellaneous additives to manufacture water based emulsions, solutions, and dispersions. These operations are conducted in batch mode.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment*
Morez Solution in Building 4	Mixing Tank (TSS-249)	Scrubber (AB-36) Carbon Adsorber(AD-11)
Morez Solution in Building 27	Morez Solution Vessel (TSS-268)	Scrubber (AB-38)
Serfene Process	5 reactors (K-104, K-153, K-171, K174, K-175)	Carbon Adsorber AD-9
Adcote Polyester Production	Polyester Reactors (K-157, K-151)	INC-4, AB-35
K178	Produce solventless polyurethane materials	INC-4
Grafted Resins Production	Wash vessels, storage tank, miscellaneous equipment	INC-5, AB-39/40
Former Dye Reactors	3 reactors (K-111, K-145, K161)	INC-8
K100/K110/K154	Batch solutions	AD-9
Morez Line II	Morez production	INC-4, DC-62
Morez Line III	Morez production	INC-5, DC-50
Building 32A Polyester	K164, K173	INC-5, AB-37
Polyurethane Production	K76, K172	INC-4
Monomer for Reaction	K78	AD-9
Building 28	10 reactors and 1 mix vessel (K-64, K-112, K-139, K-140, K-141, K-142, K-143, K-147, K-149, K-183, TSS-81)	INC-8
Building 44	K162, K163	INC-8
PSA Production	K118	INC-4
K88/K133/K132	Batch solutions	AD-9

* AD is carbon absorber, AB/DC is a scrubber, and INC is a thermal oxidizer

Note: This list does not identify all process components associated with individual reactor systems, such as heat exchangers, knock out tanks, and vacuum systems.

7.2.3 Applicability Provisions and Applicable Regulations

- a. The "affected group of emission units" for purposes of these unit-specific conditions, are the emission units described in section 7.2.1.
- b. The affected group of emission units is subject to 35 IAC 218 Subpart RR (Miscellaneous Organic Chemical Manufacturing Processes) which requires that the emission capture and control techniques achieve an overall reduction in uncontrolled VOM emissions of at least 81% from each emission unit, except as addressed by condition 7.2.4.
- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, or 218.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall only apply to photochemically reactive material [35 IAC 218.301].
- d. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of the affected emissions units in violation of the applicable standards in Conditions 7.2.3(b) and 7.2.3(c) in the event of a malfunction or breakdown of the process or control equipment. This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent risk of injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or prevent risk of injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practical shutdown the process if reaction has

been stabilized/ completed, switch to alternative control equipment, repair the affected units, remove the affected units from service or undertake other action so that excess emissions cease.

- iii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.2.9(b) and 7.2.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected units out of service.
 - iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
 - v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.
- e. Each affected emission unit at the source is subject to 35 IAC 212.321(a), which requires that:
- i. 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 I of 35 IAC 212.321 [35 IAC 212.321(a)], that is the allowable emission rates specified in the following equation:

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

Where:

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

1. For process weight rates up to 408 MG/hr (450 ton/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	ton/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

2. For process weight rates in excess of 408 MG/hr (450 ton/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	ton/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

7.2.4 Non-Applicability of Regulations of Concern

- a. i. This permit is issued based on the emission units in the following process areas not being subject to control requirements of 35 IAC 218 Subpart RR, Miscellaneous Organic Chemical Processes, because these emission units meet the exemption of 35 IAC 218.960(d), i.e.:

No limits under 35 IAC 218 Subpart RR shall apply to emission unit with emission of VOM to the atmosphere less than 0.91 Mg (1.0 tons) per calendar year if the total emissions from such emission units not complying with 35 IAC 218.966 of Subpart RR does not exceed 4.5 Mg (5.0 ton) per calendar year. [35 IAC 218.960(d)]

Morez Solution in Building 4
Morez Solution in Building 27
Morcryl Products or other Waterbased products containing isopropyl alcohol in K100/K110, K154, and Serfene Isopropyl Alcohol

- ii. If the actual VOM emissions of an emission unit are 1.0 ton or more per year, or the total actual emissions of all such emission unit being excluded from applicability of 35 IAC 218, Subpart RR, 5.0 tons or more per year, the Permittee shall promptly notify the Illinois

EPA in accordance with Condition 7.2.12, identifying the emission units that are affected and providing the plan for future compliance with 35 IAC 218, Subpart RR.

- b. i. This permit is issued based on the affected group of emission units not being subject to the following federal rules as the affected group of emission units do not manufacture the products addressed by these rules:
- 40 CFR 60, Subpart VV, III, NNN, and RRR - synthetic organic chemicals listed at 40 CFR 60.489, 60.617, 60.667, or 60.707.
 - 40 CFR 60, Subpart DDD - polypropylene, polyethylene, polystyrene, and poly(ethylene terephthalate) as defined at 40 CFR 60.561.
 - 40 CFR 63, Subpart U - elastomer products as defined at 40 CFR 63.480(b).
 - 40 CFR 63, Subpart V - ethylene dichloride, vinyl chloride or polymers containing polymerized vinyl chloride.
 - 40 CFR 63, Subpart W - basic liquid epoxy resin or wet strength resins using epichlorohydrin as the primary reactant.
 - 40 CFR 63, Subpart JJJ - primary production of thermoplastic products that are greater than 80% styrene or alpha-methyl styrene.
 - 40 CFR 63, Subpart MMM - pesticides, herbicides, or fumigants with hazardous active ingredients covered by the MACT standard.
 - 40 CFR 63, Subpart OOO - primary production of amino or phenolic based resins.
 - 40 CFR 63, Subpart PPPP - polyether polyols manufacturing unit.
 - 40 CFR 63, Subpart HHHHH - coatings
- ii. This permit is issued based on the affected group of emission units not being subject to the following federal rules because affected

group of emission units do not manufacture or use the chemicals addressed by these rules:

- 40 CFR 63, Subpart F, G, H, and I - manufacture of any synthetic organic chemicals listed in 40 CFR 63.106 Table 1 and manufacture or use of any synthetic organic chemicals listed in 40 CFR 63.106 Table 2.
- iii. The affected units are not subject to 40 CFR Part 63, Subpart FFFF, because the source has taken on limits to be a synthetic minor source of HAPs.
- iv. The affected units are not subject to 40 CFR Part 63, Subpart EEEE, because all the potentially covered units are already associated with a process covered by Subpart FFFF.
- v. Prior to using the affected group of emission units so that any of the above rules is applicable, the Permittee shall:
- Notify Illinois EPA;
 - Fulfill relevant requirement of the applicable rule for a newly affected unit;
 - Obtain a revision to this CAAPP permit; and
 - Obtain a Construction Permit(s), as necessary for any modification to the affected group of emission units.

7.2.5 Control Requirements and Work Practices

- a. For AD-9, the Permittee shall review the temperature charts for the carbon adsorption beds to verify that timed regeneration of the beds is occurring.

7.2.6 Production and Emission Limitations

- a. In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, certain affected emission units are subject to the following emission limitations:

Emission Units(s)	VOM Limit (TPY)	Construction Permit
K-154	2.48	89010053
Morez Solution Building 27	0.79	89080049

Emission Units(s)	VOM Limit (TPY)	Construction Permit
Grafted Resins	3.27	89080048
Development Area Building 44 (K-162, K-163)	1.77	89100052
Grafted Resin Washing	0.83	91120089
K-172 Replaced K-117	4.52	93010052
Morez Line II	4.8	93010054
Morez Line III	4.8	
Morthane K-173	0.5	93090068
K-174 with TSS-339, TSS-340, and Monomer Blend Tank K-176	5.07	94120033
Reactors K-157 with Drop Tank K-179	2.59	96090032
K-178 Replaced K-121 with Drop Tank K-179	4.32	98100007 and 96090032
Intermediate Storage Tanks TSS-395 and TSS-396	0.12	98110006
Total	35.86	

* Permitted increase over any five consecutive years is less than 25 tpy.

- b. 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).

7.2.7 Testing Requirements

Upon reasonable request by the Illinois EPA, pursuant to section 39.5(7)(d) of the Act, the Permittee shall test for VOM emissions or efficiency. For VOM emissions, USEPA Method 18 or 25A shall be used. The following methods and procedures shall be used for testing of capture efficiency:

35 IAC 218.105(c)(2)

7.2.8 Monitoring Requirements

- a. For oxidizers, e.g., INC-4, INC-5, and INC-8 the Permittee will continuously monitor combustion temperature, pursuant to 35 IAC 218.105. The Permittee will operate INC-4 and INC-5 to maintain the combustion temperature at or above 1600°F. The permittee will operate INC-8 to maintain the combustion temperature at or above 1500°F. Compliance with the temperature thresholds will be determined on rolling 15 minutes averages.
- b. For carbon adsorber AD-9, the Permittee will comply with 35 IAC 218.105(d)(2)(A)(iii) by continuously collecting and recording the concentration of VOM in the bed exhaust of

the adsorber. For this purpose, it is acceptable to monitor for total organic carbon or vinylidene chloride, which is the principle component of the VOM.

- c. For adsorber AD-9, during periods of monitoring equipment malfunction, the Permittee shall:
 - i. Record the duration of all monitoring equipment malfunctions and record the hours the associated source is operated without monitoring device.
 - ii. Provide written notice to the Agency within 10 days following the conclusion of any 72 hour period during which an adsorber is operated and the associated monitoring equipment is not operational. This notice must provide the duration of the malfunction, a description of the repairs made to the equipment, and the total to date of all hours in the calendar year during which the adsorber was operated and the associated monitoring equipment was not operational.
 - iii. Operate the adsorber using timed sequence as the basis for periodic regeneration or bed replacement of the adsorber.
- d. The Permittee will maintain the following information for control devices for a period of three years pursuant to 35 IAC 218.991(a)(2):
 - i. Control device monitoring data;
 - ii. A log of operating time for the capture system, control device, monitoring equipment, and the associated source; and
 - iii. A maintenance log for the capture system, control device, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- e. Compliance Assurance Monitoring (CAM) Requirements

The affected emission units are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the Compliance Assurance Monitoring (CAM) Plan described in Attachment 3, Tables 3.1 to 3.4 pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the

affected emission units to demonstrate compliance with Conditions 5.6.1 and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

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

- i. Type of product;
- ii. Monthly and annual production, lb; and
- iii. The monthly and annual aggregate VOM emissions from the affected emission units based on the throughput and emission factors, with supporting calculations except for Morez Lines II and III which will be based on a mass balance before control, with supporting calculations using appropriate control efficiencies.

b. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an affected units subject to Condition 7.1.3(d) during malfunctions and breakdown, which as a minimum, shall include:

- i. Date and duration of malfunction or breakdown.
- ii. A detailed explanation of the malfunction or breakdown.
- iii. An explanation why the affected units continued to operate in accordance with Condition 7.1.3(d).
- iv. The measures used to reduce the quantity of emissions and the duration of the event.
- v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
- vi. The amount of release above typical emissions during malfunction/breakdown.

c. Records for Compliance Assurance Monitoring (CAM) Requirements

The Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements in Condition 7.1.8(a), as required by 40 CFR 64.9(b)(1).

7.2.10 Reporting Requirements

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

Emissions of VOM from the affected emission units in excess of the limits specified in Condition 7.2.3 or 7.2.6 within 30 days of such an occurrence.

- b. The Permittee shall provide the following notification and reports to the Illinois EPA, Compliance Section and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of a control equipment subject to Condition 7.2.3(b) during malfunction or breakdown.
 - i. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown.
 - ii. Upon achievement of compliance, the Permittee shall give a written follow-up notice to the Illinois EPA, Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the control equipment was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the control equipment was taken out of service.
 - iii. If compliance is not achieved within 5 working days of the occurrence, the Permittee shall submit interim status reports to the Illinois EPA, Compliance Section and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the expected date on which repairs will be complete or the control equipment will be taken out of service.
- c. Upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 IAC 218 Subpart RR, Miscellaneous Organic Chemical

Manufacturing Processes, shall submit records to the Illinois EPA within 30 calendar days from the date of the request that document that this emission unit is exempt from those requirements [35 IAC 218.990].

d. Reporting of Compliance Assurance Monitoring (CAM)

The Permittee shall submit monitoring reports to the Illinois EPA in accordance with Condition 8.6.1 and shall include, at a minimum, the information required under Condition 8.6.1 and the following information [40 CFR 64.6(c)(3), 64.9(a)(1), and (2)]:

- i. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective actions taken [40 CFR 64.6(c)(3) and 64.9(a)(2)(i)]; and
- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks [40 CFR 64.6(c)(3) and 64.9(a)(2)(ii)].

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

- a. The process emission units detailed in section 7.2.1 and 7.2.2 consist of batch, semi-continuous, and continuous operations, utilizing the equipment listed in section 7.2.2 and additional insignificant equipment in various configurations and sequences, involving variable batch times and batch cycles. In order to produce the products described in section 7.2.1 for each process emission unit, the Permittee uses a variety of chemical components and raw materials, and produces various chemical intermediates. Nothing in this permit is intended to restrict the Permittee's operations involving these processes to the extent that the Permittee satisfies all the applicable rules and all the applicable limitations specified in this permit. Nothing herein is intended to authorize construction of a new source or a physical modification to the existing sources included within the individual process emission units without a construction permit, except to the extent otherwise authorized by the applicable standards.
- b. For Morez Lines II and III, the process emission units are permitted to operate either with the primary control device (INC-4 for Morez II and INC-5 for Morez III) or with a secondary control equipment (HX154/HX220 for Morez II and HX182 for Morez III).
- c. For Polyurethane Production, the normal mode of operation will be with emissions controlled by INC-4. The alternative operating scenario will be the production of non-volatile materials when the control device is not

available. For purposes of this operating scenario, non-volatile material is considered organic material with a vapor pressure less than 1.0mm Hg at 70°F (or otherwise excluded from the definition of a VOC at 35 IAC 211.7150). A log recording the time when the alternative operating scenario is used.

- d. Reactor K-118, included in the PSA Production process emission unit, may also produce polyurethane adhesives.
- e. For Monomer for Reaction process emission unit, the Permittee may utilize Serfene Process or K100 emission unit reactors. This provision is based on no increase in annual charging gallons of monomer for reaction to all reactors.

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.3(c) is addressed by the work-practices in Condition 7.2.5 and the recordkeeping requirements of Condition 7.2.9.
- b. Compliance with Condition 7.2.3(d) is addressed by the work-practices in Condition 7.2.5, the recordkeeping requirements of Condition 7.2.9, and the reporting requirements in Condition 7.2.10.
- c. Compliance with Condition 7.2.6 is addressed by the work-practices in Condition 7.2.5, the testing requirements of Condition 7.2.7, the monitoring requirements of Condition 7.2.8, the recordkeeping requirements of Condition 7.2.9, the reporting requirements in Condition 7.2.10, mass balance before control [Morez Lines II and III], and the emission factors below:

	Before Control Emission Factors lb VOM/1000 lb Product	After Control Emission Factors lb VOM/1000 lb Product	Maximum Production Rate mm* lb/yr
Group No. 2			
Morez Solution, Building 4	0.00000939	0.00000939	30.66
Morez Solution, Building 27	0.130	0.130	12.26
Serfene Process, including K-174 with K-176	5.94	0.594	33.00
Adcote Polyester, including K-157 with Drop Tanks	36.99	0.779	17.70
K-178 with Drop Tank	1.36	0.076	10.30
Grafted Resins/Grafted Washing			
Grafted Resin Alone	25.12	1.820	7.88
Washing Alone	60.34	2.019	0.82
Former Dye Reactors	50.00	6.750	0.54
K100/K110	1.04	0.193	37.99
K154	0.67	0.124	40.00

	Before Control Emission Factors lb VOM/1000 lb Product	After Control Emission Factors lb VOM/1000 lb Product	Maximum Production Rate mm* lb/yr
Group No. 2			
Building 32A, Polyester, including K-173	6.35	0.071	28.05
Polyurethane including K-172	4.89	0.319	35.87
Monomer for Reaction	1.31	0.243	18.26
Development Area Building 28	6.77	0.998	7.12
Development Area Building 44	6.81	1.066	0.88
K88/K133	0.539	0.101	14.31
K132	1.28	0.238	5.20
PSA Production	19.80	1.481	4.69
Storage Tanks TSS-395 and TSS-396	0.0111	0.0111	21.6

* For informational purposes only.

These are the emission factors for uncontrolled and controlled VOM emissions and are based on the stack tests and/or engineering estimate.

VOM emission (lb) = (production, lb/1000) x (emission factors, lb VOM/1000 lb product)

7.3 Group 3 Polymer Wash Water Reduction Unit

7.3.1 Description

The Permittee operates various units as follows, to treat certain byproducts from its manufacturing operations.

Polymer Wash Water Reduction Unit:

The polymer wash water reduction system consists of a two stage evaporator system and associated tanks/equipment. It is used to concentrate a solids wash water stream to a paste for disposal. The distillate is processed by biological treatment.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Polymer Wash Water Reduction Unit	Waste Water from APV Unit (TSS-24)	None
	Feed Stock Tank (TFG-23)	None
	Feed Holding Tank (TFG-24)	None
	Ph Adjustment Tank (TFG-22)	None
	Storage Tank Before EV-7 (TS-239)	None
	Day Tank For EV-7 (TS-209)	None
	Luwa, Evaporate Water (EV-7)	Carbon Adsorber (AD-9)
	Sludge Extractor Pump (P-3)	None
	Concentrator (APV Unit)	None
	Vapor Body Dimister (TSS-210)	None
	APV Stripper (PC-13)	Carbon Adsorber (AD-9)
	Shuttel Slide Bed Belt Conveyor (M-3, M-4)	None
	Heat Exchanger (HX-104, HX-105)	None
	Flush Tank (HE-123)	None
	Snubber (TSS-344)	None
	Blower (Bl-187)	None
	Drum Collector From F-196	None
Filter Screen for APV Unit (F-196)	None	

Note: This list does not identify all process components associated with individual reactor systems, such as heat exchangers, knock out tanks, and vacuum pumps.

7.3.3 Applicability Provisions and Applicable Regulations

- a. The affected polymer wash water reduction for purposes of these unit-specific conditions is described in Section 7.3.1.
- b. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC

218.302, 218.303, or 218.304 and the following exemption:
If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall only apply to photochemically reactive material [35 IAC 218.301].

- c. The affected polymer wash water reduction system is subject to 35 IAC 218 Subpart TT (Other Emission Units) which requires that emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81% from each emission unit.
- d. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of the affected emissions units in violation of the applicable standards in Conditions 7.3.3(b) and 7.3.3(c) in the event of a malfunction or breakdown of the process or control equipment. This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent risk of injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or prevent risk of injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practical shutdown the process if reaction has been stabilized/completed, switch to alternative control equipment, repair the affected units, remove the affected units from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.3.9(b) and 7.3.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that

excess emissions cease or the Permittee takes the affected units out of service.

- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.3.4 Non-Applicability of Regulations of Concern

The affected polymer wash water reduction is not subject to 40 CFR Part 63, Subpart FFFF, because the source is not major for HAPs and Subpart EEEE because it does not meet the applicability requirements.

7.3.5 Control Requirements and Work Practices

- a. The carbon adsorber system (AD-9) shall be operated in a manner that is consistent with operation during compliance testing, including appropriate regeneration of the carbon beds, to demonstrate compliance with 35 IAC 218.986(a).
- b. Notwithstanding Condition 7.3.3(c), the Permittee may operate the polymer waterwash evaporator CEV-7 without a control device when processing wastewater which has already been stripped to remove VOM, e.g., wastewater that has been processed by the concentrator (APV). This reflects the minimal emission of the evaporator when processing stripped wastewater, such that use of control is not required pursuant to 35 IAC 218.980(d)

7.3.6 Production and Emission Limitations

Production and emission limitations are not set for the affected polymer wash water reduction. However, there are source-wide production and emission limitations set forth in Condition 5.6.

7.3.7 Testing Requirements

Upon reasonable request by the Illinois EPA, pursuant to section 39.5(7)(d) of the Act, the Permittee shall test for VOM

emissions or efficiency. For VOM emissions, USEPA Method 18 or 25A shall be used. The following methods and procedures shall be used for testing of capture efficiency:

35 IAC 218.105(c)(2)

7.3.8 Monitoring Requirements

- a. For carbon adsorber AD-9, the Permittee will comply with 35 IAC 218.105(d)(2)(A)(iii) by continuously collecting and recording the concentration of VOM in the bed exhaust of the adsorber AD-9. For this purpose, it is acceptable to monitor for total organic carbon or vinylidene chloride, which is the principle component of the VOM.
- b. For adsorber AD-9, during periods of monitoring equipment malfunction, the Permittee shall:
 - i. Record the duration of all monitoring equipment malfunctions and records the hours the associated source is operated without the monitoring device.
 - ii. Provide written notice to the Illinois EPA within 10 days following the conclusion of any 72 hour period during which an adsorber is operated and the associated monitoring equipment is not operational. This notice must provide the duration of the malfunction, a description of the repairs made to the equipment, and the total to date of all hours in the calendar year during which the adsorber was operated and the associated monitoring equipment was not operational.
 - iii. Operate the adsorber using timed sequence as the basis for periodic regeneration or bed replacement of the adsorber.
- d. The Permittee will maintain the following information for a period of three years pursuant to IAC 218.991(a)(2):
 - i. Control device monitoring data;
 - ii. A log of operating time for the capture system, control device, monitoring equipment, and the associated source; and
 - iii. A maintenance log for the capture system, control device, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected polymer wash water reduction unit to demonstrate compliance with Conditions 5.6.1, pursuant to Section 39.5(7)(b) of the Act:

- a. In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected polymer wash water reduction unit 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:

- i. The aggregate monthly and annual VOM emissions from the affected polymer wash water reduction system based on the wash water processed, with supporting calculations.

- b. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an affected polymer wash water reduction unit subject to Condition 7.1.3(d) during malfunctions and breakdown, which as a minimum, shall include:

- i. Date and duration of malfunction or breakdown.
- ii. A detailed explanation of the malfunction or breakdown.
- iii. An explanation why the affected polymer wash water reduction unit continued to operate in accordance with Condition 7.1.3(d).
- iv. The measures used to reduce the quantity of emissions and the duration of the event.
- v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
- vi. The amount of release above typical emissions during malfunction/breakdown.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected Polymer wash water reduction unit 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. Upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 IAC 218 Subpart TT, Other Emission Units, shall submit records to the Illinois EPA within 30 calendar days from the date of the request that document that this emission unit is exempt from those requirements [35 IAC 218.990].
- b. Emissions of VOM from the polymer wash water reduction unit in excess of the limits specified in Condition 7.3.3 or 7.3.6 within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.3 is addressed by the work-practices in Condition 7.3.5, the testing requirements of Condition 7.3.7, the monitoring requirements of Condition 7.3.8, the recordkeeping requirements of Condition 7.3.9, the reporting requirements in Condition 7.3.10, and the emission factors below:

Group No 3	Before Control Emission Factors lb VOM/1000 lb Processed	After Control Emission Factors lb VOM/1000 lb Processed	Max Process Rate* MM lb/yr
Polymer Wash Water Reduction	0.22	0.040	59.16

* For informational purposes only

These are the emission factors for uncontrolled and controlled VOM emissions and are based on the stack tests and/or engineering estimate.

VOM emission (lb) = (production, lb/1000) x (emission factors, lb VOM/1000 lb processed)

7.4 Storage Tanks

7.4.1 Description

Finished product (water based polymers) storage in aboveground storage tanks. MDI Storage (TSS-271) for storage of raw material. Tank Farm is used to store liquid raw materials that are used as feedstock within the facility.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Finished Product Storage Tanks	16,300 Gallon Finished Product Storage Tank (TSS-332, 333, 334, 335, 336, and 337)	None
	16,000 Gallon Finished Product Storage Tank (TSS-217)	None
	12,000 Gallon Finished Product Storage Tank (TSS-218)	None
	12,000 Gallon MDI Storage Tank (TSS-271)	Vapor Return Line
Tank Farm	TS-72 (10,500 Gal)	Conservation Vent Closed Loop Loading (90% Efficiency)
	TLI-4 (12,500 Gal) TLI-5 (26,000 Gal)	Pressurized Tank Carbon Adsorber (AD-9) (90.0% Efficiency)

7.4.3 Applicability Provisions and Applicable Regulations

An "affected tank" for the purpose of these unit-specific condition is a storage tank that is listed in Condition 7.4.2.

7.4.4 Non-Applicability of Regulations of Concern

- a. Except as provided in Condition 7.4.9(a) (see also 40 CFR 60.116b) storage vessels with design capacity less than 75 m³ (20,000 gal) are exempt from the General Provisions of the NSPS and from the provisions of 40 CFR 60 Subpart Kb [40 CFR 60.110b(b)].
- b. The affected tank are not subject to the limitations of 35 IAC 218.120, Control Requirements for Storage Containers of VOL, pursuant to 35 IAC 218.119, because the affected tank have a capacity less than 151 m³ (40,000 gal).
- c. The affected tanks are not subject to the requirements of 35 IAC 218.122, Loading Operations, because pursuant to 35 IAC 218.122(c), if no odor nuisance exists the limitations of this 35 IAC 218.122 shall only apply to the loading of

VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

- d. The affected tanks are not subject to 35 IAC 218.141 because separation operations do not receive effluent water containing more than 200 gallons per day of organic material.
- e. The affected tanks are not subject to 40 CFR 60, Subpart K and Ka because the tanks do not have a capacity 40,000 gallons or more.
- f. The affected tanks are not subject to 35 IAC Sections 218.120,210,121, and 218.129 through 218.129 because the tanks do not have a capacity of 40,000 gallons or more.
- g. The affected polymer tanks are not subject to 40 CFR Part 63, Subpart FFFF, because the source is not major for HAPs and Subpart EEEE because it does not meet the applicability requirements.

7.4.5 Operational and Production Limits and Work Practices

The affected tanks shall have a submerged fill pipe, utilize a vapor balance system during filling and be vented to a VOM control device, be a pressure tank, or be used only for the storage of liquid with a vapor pressure less than 2.5 psia.

7.4.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

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

- a. Readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the source [40 CFR 60.116b(a), and (b), and 35 IAC 218.129(f)];

- b. The throughput of the affected tank, gal/mo and gal/yr; and
- c. The annual VOM emissions from the affected tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.4.10 Reporting Requirements

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

The storage of any VOL or VPL other than the material specified in Condition 7.4.5 within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:

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

7.5 Egan Coater

7.5.1 Description

This unit is used to develop and test different coating adhesives to see which can go into full scale production. It will be capable of applying solvent, water, or solventless coatings.

The coater is equipped with two application stations for apply coatings. The coater is also equipped with two 7.5 KW corona arc treaters to condition the film prior to coating.

Note: This narrative description is for informational purposes only and is not enforceable.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Egan Coater	Coating Development	2003	INC-8

7.5.3 Applicable Provisions and Regulations

- a. The "affected coater" for the purpose of these unit-specific conditions, is the Egan coater described in Conditions 7.5.1 and 7.5.2.
- b. The affected coater is subject to 35 IAC 218.204(j), any coatings applied in the coating operation when the control device is not in use shall not exceed 3.5 lb VOM per gallon of coating (lb/gallon) (minus water and any other compounds which are specifically exempted from the definition of VOM) as applied at each applicator.
- c. The affected coater is subject to 35 IAC 218.207, when coatings containing more than 3.5 lb VOM per gallon are applied, the VOM emissions of the coating operation shall be controlled by at least 81 percent from the control device.
- d. The affected coater is subject to 35 IAC 212.321(b)(1), which provides that the Permittee shall not 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 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)].

7.5.4 Non-Applicability of Regulations of Concern

- a. The affected coater is not subject to 40 CFR Part 63, Subpart FFFF, because the source is not major for HAPs and does not meet the applicability criteria of Subpart HHHHH.

7.5.5 Control Requirements and Work Practices

- a. The permanent total enclosure (PTE) on the affected coater shall be exhausted to a control device (INC-8) that is operated at a destruction efficiency for emissions of volatile organic material (VOM) of at least 98 percent whenever coatings that do not comply with 35 IAC 218.204 are being applied.

7.5.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected coater is subject to the following:

- a. Coating, solvent, and cleaning solvent usage in the pilot coating operations shall not exceed 19.3 tons/month and 193.1 tons/year. 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). This limit was established in Permit 02110051 [T1].
- b. Volatile organic material (VOM) emissions from the pilot coating operations shall not exceed 1.0 tons/month and 10.0 tons/year. For this purpose of determining compliance with these limitations

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).

The above limitations were established in Permit 02110051, pursuant to 35 IAC Part 203. 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 35 IAC Part 203 [T1].

7.5.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA, pursuant to section 39.5(7)(d) of the Act, the Permittee shall test for VOM emissions, PTE, or efficiency. For VOM emissions, USEPA Method 18 or 25A shall be used. For the PTE, USEPA Method 204 or Illinois Method Part 218, Appendix B

Procedures T or other capture testing procedures approved by the Illinois EPA.

- b. The following methods and procedures shall be used for testing of capture efficiency:

35 IAC 218.105(c)(2)

7.5.8 Monitoring Requirements

Monitoring requirements are not set for the affected coater.

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected coater to demonstrate compliance with Conditions 5.6.1 and 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall keep the following operating records for the affected coater:
 - i. The properties of the coating, solvents and cleaning solvent for each material or type of material, as follows:
 - A. Approach to compliance, that is use of afterburner or compliant coatings (i.e., VOM content of applied coating).
 - B. Weight (lb/gallon).
 - C. VOM content (lb/gallon) with supporting documentation.
 - D. VOM content as applied (lb/gallon) if different than the above VOM content.
 - E. Total HAP content of coating (lb HAP/gallon), as provided by Material Data Sheets or other similar source of data.
 - F. Individual HAP content of coating (lb HAP/gallon) for the HAP present in the greatest amount of the coating and solvent used in the pilot coating operations.
 - ii. Usage of materials (gallons/month) by individual material or type of material.
 - iii. Coating and solvents used (tons/month and tons/year).
- b. The Permittee shall keep an operating log for the affected coater that includes:

- i. Each period of operation, and whether "water-based" coating is being applied or other solvent-based coating is being applied.
 - ii. The records required by 35 IAC 218.211(c) or (e) for the pilot coating operations for periods of time when use of compliant coatings or the afterburner are required, respectively.
 - iii. The records for any period of time when the pilot coating operations operated when operation of the control device was required but its control device was not in service or was not functioning properly.
- c. The Permittee shall keep the following emission records for the affected coater with supporting calculations:
 - i. VOM emissions (tons/month and tons/year).
 - ii. Total HAP emissions (tons/month and tons/year).

7.5.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected coater 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:

- i. Emissions of VOM from the affected coater in excess of the limits specified in Condition 7.1.6 within 30 days of such occurrence.
- ii. Operation of the affected coater in excess of the limits specified in Condition 7.1.6 within 30 days of such occurrence.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected coater.

7.5.12 Compliance Procedures

- a. Compliance with Condition 7.5.3 is addressed by the work-practices in Condition 7.5.5, the testing requirements of Condition 7.5.7, the monitoring requirements of Condition 7.5.8, the recordkeeping requirements of Condition 7.5.9, and the reporting requirements in Condition 7.5.10.

- b. Compliance with Condition 7.5.6 is addressed by the work-practices in Condition 7.5.5, the testing requirements of Condition 7.5.7, the monitoring requirements of Condition 7.5.8, the recordkeeping requirements of Condition 7.5.9, and the reporting requirements in Condition 7.5.10.

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 _____ (the date of issuance of the proposed 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].

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 if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit.

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 Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA

every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit [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 determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The

test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

- i. Illinois EPA - Air Compliance Unit

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

- ii. Illinois EPA - Air Quality Planning Section

Illinois Environmental Protection Agency
Bureau of Air
Air Quality Planning Section (MC 39)
P.O. Box 19276
Springfield, Illinois 62794-9276

iii. Illinois EPA - Air Regional Field Office

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

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

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

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the CAA (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a revision or combination of conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

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.

9.1.2 In particular, this permit does not alter or affect the following [Section 39.5(7)(j)(iv) of the Act]:

- 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, pursuant to Section 39.5(7)(j) and (p) of the Act, 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, or 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 this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [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 there under.

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 as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]:

- 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 applicable requirements; 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 regulated activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At 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 including any logs, plans, procedures, or instructions required to be kept 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, Air Quality Planning 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 Unit, 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 and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 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 [Section 39.5(7)(k) of the Act]:

- 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.

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- 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 [Section 39.5(7)(k)(iv) of the Act].

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, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, 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 that inaccurate statements were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

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 and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) 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. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and 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

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Section 39.5(5)(l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal

application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

10.0 ATTACHMENTS

Attachment 1 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: _____

Attachment 2 Emissions of Particulate Matter from Process Emission Units

- a. New Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321].
- i. 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 [35 IAC 212.321(a)].
- ii. 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,

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

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

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

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	11.42	24.8
B	0.16	0.16

iii. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
<u>Mg/hr</u>	<u>kg/hr</u>	<u>T/hr</u>	<u>lb/hr</u>
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

iv. For process weight rates of less than 100 pounds per hour, the allowable rate is 0.5 pounds per hour [35 IAC 266.110].

b. Existing Process Emission Units for Which Construction or Modification Prior to April 14, 1972 [35 IAC 212.322].

- i. 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 units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

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

where:

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

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

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

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

	<u>Metric</u>	<u>English</u>
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

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

Metric P <u>Mg/hr</u>	E <u>kg/hr</u>	English P <u>T/hr</u>	E <u>lb/hr</u>
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

iv. For process weight rates of less than 100 pounds per hour, the allowable rate is 0.5 pounds per hour [35 IAC 266.110].

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

Table 3.1 PSEU Designation:	Adcote Polyester, Morez Line II
Significant Emission Unit Section:	7.2
Pollutant:	VOM

Indicators:	#1: Oxidizer Temperature Control	#2: Work Practice
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GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	Continuously monitoring the temperature of the combustion chamber	Inspection and maintenance of the burner
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	An excursion is defined as temperature reading below 1600 degrees F. It triggers an audible alarm, inspection, corrective action , and a reporting requirement.	An excursion is defined as a failure to perform annual preventive maintenance on the oxidizer.
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	876 fifteen minute rolling averages below the indicator range in any semiannual reporting period	N/A

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	Any temperature monitoring device employed to measure the oxidizer temperature (i.e. probe) shall be accurate within +/- 5 degrees F	NA
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	Temperature recorded on chart paper or electronic media	NA
QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	Validation of oxidizer temperature compared to probe reading conducted annually Acceptance criteria +/- 20 degrees F	NA
THE MONITORING FREQUENCY:	Continuous	Annual inspection and preventative maintenance on the unit
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Chart paper or electronic media	Log of maintenance
THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:	Rolling 15 minute average	NA

Table 3.2 PSEU Designation:	Grafted Resins/Washing Morez Line III
Significant Emission Unit Section:	7.2
Pollutant:	VOM

Indicators:	#1: Oxidizer Temperature Control	#2: Work Practice
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GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	Continuously monitoring the temperature of the combustion chamber	Inspection and maintenance of the burner
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	An excursion is defined as temperature reading below 1600 degrees F. It triggers an audible alarm, inspection, corrective action, and a reporting requirement.	An excursion is defined as a failure to perform annual preventive maintenance on the oxidizer.
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	876 fifteen minute rolling averages below the indicator range in any semiannual reporting period	N/A

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	Any temperature monitoring device employed to measure the oxidizer temperature (i.e. probe) shall be accurate within +/- 5 degrees F	NA
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	Temperature recorded on chart paper or electronic media	NA
QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	Validation of oxidizer temperature compared to probe reading conducted annually. Acceptance criteria +/- 20 degrees F	NA
THE MONITORING FREQUENCY:	Continuous	Annual inspection and preventative maintenance on the unit
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Chart paper or electronic media	Log of maintenance
THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:	Rolling 15 minute average	NA

Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

www.epa.state.il.us/air/caapp/index.html

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

www.epa.state.il.us/air/caapp/199-caapp.pdf

www.epa.state.il.us/air/permits/197-fee.pdf

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