

217/782-2113

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

PERMITTEE

W. R. Grace & Co. - Conn.
Attn: Lawrence J. Sorensen
6050 West 51st Street
Chicago Illinois 60638-1219

<u>Application No.:</u> 96030028	<u>I.D. No.:</u> 031821ABD
<u>Applicant's Designation:</u>	<u>Date Received:</u> November 24, 2003
<u>Operation of:</u> Container Sealant Manufacturing Facility	
<u>Date Issued:</u> March 29, 2005	<u>Expiration Date</u> ² : March 29, 2010
<u>Source Location:</u> 6050 West 51st Street, Chicago, Cook County	
<u>Responsible Official:</u> Jim Hansen, Plant Manager	

This permit is hereby granted to the above-designated Permittee to OPERATE a Container sealant manufacturing facility, 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 Jack Yates at 217/782-2113.

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

DES:JMY:psj

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

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

W. R. Grace & Co. - Conn.
6050 West 51st Street
Chicago, Illinois 60638
708/458-0340

I.D. No.: 031821ABD
Standard Industrial Classification: 2891, Adhesives and Sealants

1.2 Owner/Parent Company

W. R. Grace & Co.- Conn.
7500 Grace Drive
Columbia, Maryland 21044

1.3 Operator

W. R. Grace & Co. - Conn., Darex Container Products
6050 West 51st Street
Chicago, Illinois 60638

Larry Sorensen
708/458-0340

1.4 General Source Description

The W. R. Grace & Co. - Conn. Darex Container Products is located at 6050 West 51st Street in Chicago. The source is a can sealant manufacturer. They fabricate container sealants and lubricant fluids. In addition, the source also manufactures construction chemicals and Sodasorb® (carbon dioxide absorbent).

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	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
ATUs	Allotment Trading Units
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EIIP	USEPA Emission Inventory Improvement Program
ERMs	Emissions Reduction Market System
°F	Degrees Fahrenheit
ft ³	Cubic Feet
gal	Gallon
HAP	Hazardous Air Pollutant
hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
°K	Degrees Kelvin
Kg	Kilogram
kPa	Kilopascals
kW	kilowatts
lb	Pound
MACT	Maximum Achievable Control Technology
Mg	Megagram
mmBtu	Million British thermal units
mo	Month
MW	Megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
OELs	Open End Lines
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	Parts per million
psia	Pounds per Square Inch Absolute
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
SOCMI	Synthetic Organic Chemical Manufacturing Industry
T	tons

T1	Title I - identifies Title I conditions that have been carried over from an existing construction 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 construction permit and subsequently revised in the permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
yr	year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

- 4 Concrete Products Admixture (CPA) Mixers
- 14 CPA Storage Tanks
- 2 Water Reducer Products (WRP) Day Tanks
- 2 WRP Storage Tanks
- 1 WRP Tote Filling Station (WRPTS)
- 1 Water Based Can Sealing Process - (WB) Mixer Hood and Particulate Filter

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:

- 3 Solvent Lining Compound (SLC) Banbury Solids Bins
- 1 SLC 2 Roll Mill
- 3 SLC Homogenizers
- 1 SLC Solvent Shack Cowels Mixer
- 1 SLC Solvent Shack Pail Mixer
- 1 SLC Pail Crusher
- 1 SLC Parts Washer
- 10 Water Based Can Sealing (WBC) Storage Tanks
- 5 WBC Vacuum Kettles
- 2 WBC Wax Kettles
- 2 WBC Struthers Wells
- 1 WBC Dual Shaft Mixer
- 1 WBC DSM Blend Tank
- 3 WBC DSM Dust Collectors
- 2 WBC Clay Kettles
- 1 WBC Pail Mixer
- 2 WBC Drill Press Mixer
- 1 WBC Cowels Mixers
- 2 WBC Small Experimental Batch Kettles
- 1 WBC Attritor
- 1 WBC Dust Collector Vacuum
- 1 WBC Dust Collector SW
- 1 WBC Dust Collector BW
- 1 WBC Dust collector Turbo
- 1 WBC Finishing Kettle
- 1 WBC Nautas & Dust Collection
- 7 SCC Specialty Construction Chemicals) East Mixers A-G
- 1 Dust Collector SCC
- 7 SCC Mixers
- 1 WBC Hot Oil Heater
- 9 SCC East Storage Tanks 60-64, 65A, 65B, 66, and 67

30 SCC West Storage Tanks
1 SCC Tank
1 DP Hold Tank
2 DP Mix Tanks
1 DP Bag Feed Hopper
1 DP Solids Conveying Equipment
1 DP Tote Filling Station

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:

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

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

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
01 10 SLC Solvent Storage Tanks	Storage Tank 42 5,000 Gal	1/87	None
	Storage Tank 69 36,000 Gal	1/87	None
	Storage Tank 70 36,000 Gal	1/87	None
	Storage Tank 71 36,000 Gal	1/87	None
	Storage Tank 72 36,000 Gal	1/87	None
	Storage Tank 73 11,000 Gal	1/87	None
	Storage Tank 74 11,000 Gal	1/87	None
	Storage Tank 75 15,000 Gal	1/87	None
	Storage Tank 76 15,000 Gal	1/87	None
	Storage Tank 77 11,000 Gal	1/87	None
02 Banbury Mixer	Mixer Including Associated Equipment	1940	Dust Collector Fabric Filters
03 SLC Solvent Mixers & SLC/RM Duo-Mode Mixer & SW Solvent Base Struthers Wells Mixers	SLC Mixer SW0	Pre 1972	None
	SLC Mixer SW1	Pre 1972	None
	SLC Mixer SW2	Pre 1972	None
	SLC Mixer SW3	4/2002	None
	SLC Mixer SW4	Pre 1972	None
	SLC Mixer SW5	Pre 1972	None
	(SLC Mode) Mixer SW6 (Duo-Mode Mixer)	4/2002	None
	(RM Mode) Mixer SW6 (Duo-Mode Mixer)	4/2002	Dust Collector (Manway Hood Exhaust Filter)
	SW Mixer SW7	4/2002	None
	SW Mixer SW8	4/2002	None
04 10 SLC Blend/Storage Tanks & 2 WT Solvent Base Weigh Tanks	Tank BST-1	1/39	None
	Tank BST-2	1/39	None
	Tank BST-3	1/39	None
	Tank BST-4	1/39	None
	Tank BST-5	1/39	None
	Tank BST-6	1/39	None
	Tank BST-7	1/39	None
	Tank BST-8	1/39	None
	Tank BST-9	1/39	None
	Tank BST-10	1/39	None
	Weigh Tank WT-1	4/2002	None
	Weigh Tank WT-2	4/2002	None
05 SLC Packaging & SBNBP Packaging	SLC Tank Truck Bulk	1/39	None
	SLC Non-Bulk Packaging	1/39	None
	SBNBP Solvent Base Non-Bulk Packaging Station	4/2002	None
06 SLC RAK Tank	Tank SLC-RAK	1/60	None
07	North American Boiler	2/74	None
	Cleaver Brooks Boiler	2/74	None
	Ray Boiler #1	2/74	None
	Ray Boiler #2	2/74	None

Emission Unit	Description	Date Constructed	Emission Control Equipment
08 Fugitive VOM Emissions	Pumps, Valves, Flanges, and OELs	Pre 1972	None
09 ASP Sodasorb® Process Equipment	Baghouse-CB1	4/2002	None
	Lime Storage Silo-A1	4/2002	None
	Baghouse-CB2	4/2002	None
	Lime Bin-A2	4/2002	None
	Mixer-A3	4/2002	None
	Oven-A4 (6.09 mmBtu/hr)	4/2002	None
	Crusher-A5	4/2002	CB4 Main Dust Collector 1
	Sifter-A6	4/2002	
	Pulverizer-A7	4/2002	
	CB5 Fines Recycle Baghouse	4/2002	None
	CB3 Fines Baghouse	4/2002	None
	REG Fines Bin-A13	4/2002	None
	IND Fines Bin-A14	4/2002	None
	Weigh Belt/Wetting Belt Conveyer-A8	4/2002	CB6 Main Dust Collector 2
	Product Storage Bins-A9	4/2002	
Pre-Pak Machines-A10	4/2002		
Canister Pack Machine-A11	4/2002		
Bulk Packaging-A12	4/2002		
Overhead Conveyor Transfer Points	4/2002		

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

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

5.2 Applicable Regulations

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

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b.
 - i. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].
 - ii. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].
 - iii. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].
- c. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Ozone Depleting Substances

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

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Future Regulations

- a. Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in Part 68, then the owner or operator shall submit a Risk Management Plan (RMP) by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70 or 71.
- b. Should this stationary source, as defined in 40 CFR Part 63, become subject to 40 CFR Part 63, then the owner or operator shall comply with the applicable requirements of 40 CFR Part 63 by the date(s) specified in the NESHAP and shall certify compliance with the applicable requirements of 40 CFR Part 63 as part of the annual compliance certification as required by 40 CFR Part 70 or 71.

5.3 Non-Applicability of Regulations of Concern

The source is not subject to the Miscellaneous Organic Chemical Manufacturing NESHAP, 40 CFR 63 Subpart FFFF, because the source is not major for HAPs.

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

- a. Annual production for the affected solvent mixers, in total, shall not exceed 2 million pounds per month and 16 million pounds per year of solvent based can sealant (SLC mode), and shall not exceed 1 million pounds per month and 7 million pounds per year of solution polymer (solution polymer mode).
- b. The Permittee shall use good air pollution control practices to minimize emissions from affected mixers.

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	29.28
Sulfur Dioxide (SO ₂)	0.09
Particulate Matter (PM)	1.67
Nitrogen Oxides (NO _x)	15.02
HAP, not included in VOM or PM	---
Total	46.06

5.5.2 Emissions of Hazardous Air Pollutants

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. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 5.7.2 and 5.9.1.

5.5.3 Other Source-Wide Emission Limitations

- a. Emissions from the source shall not exceed the following limitations:

Pollutant	Emissions		Underlying Rules
	(Tons/Mo)	(Tons/Year)	
VOM	4.0	29.31	35 IAC Part 203

- b. Emissions from solvent storage tanks listed in condition 7.1.2, the Banbury mixer listed in condition 7.2.2, the solvent mixers listed in condition 7.3.2 (including SW6 Duo-mode mixer when in the SLC mode, but excluding the SW6 Duo-mode mixer when in the RM mode), and the blend/storage tanks listed in condition 7.4.2 shall not exceed the following limitations:

Pollutant	Emissions		Underlying Rules
	(Tons/Mo)	(Tons/Year)	
VOM	3.4	20.20	35 IAC Part 203

The limits on VOM are limitations established in Permit 02010039, 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. See Condition 7.1.6, 7.2.6, 7.3.6, and 7.4.6. [T1]

- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, and 5.5.3 pursuant to Section 39.5(7)(b) of the Act:

- a. Total monthly and annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.
- b. The Permittee shall maintain a listing of the VOM emission units and annual VOM emissions at the source to which the exclusion to the control requirements of 35 IAC 218.940(d) is being applied.

No later than May 1 of each year, the Permittee shall review and compile the VOM emission data for the excluded emission units and their emissions to confirm that the criteria for exclusion are satisfied.

5.6.2 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations 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 Permittee shall notify the Illinois EPA within 30 days of any VOM emission units at the source that are being excluded from the control requirements of 35 IAC 218.940(d) for which the criteria for the exclusion from the control requirements of 35 IAC 218.940(d) have not been satisfied.

The Permittee shall notify the Illinois EPA within 30 days of any deviations from condition 5.5.3.

5.7.2 Annual Emissions Report

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

5.7.3 Annual Reporting of HAP Emissions

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source, including the following information, so as to demonstrate whether the source is being operated as a non-major source of HAP emissions. This report shall be submitted with the Annual Emissions Report (Condition 9.7).

- a. The annual emissions of individual HAPs for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year, (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all); and
- b. The total annual emissions of all HAPs combined for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year, (e.g., for the month of January, the emissions from February of the preceding calendar year through January; for the month of February, the emissions from March of the preceding calendar year through February; 12 months in all).

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating VOM Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 EMISSION REDUCTION MARKET SYSTEM (ERMS)

6.1 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 should 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).

6.2 Applicability

Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not exceed 15 tons, not including VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit. This limitation is established at the request of the source to exempt it from the requirements of 35 IAC Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 IAC 205.205.

6.3 Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to determine compliance with the above limitation:
 - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period.
- b. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by November 30 of each year, reporting actual emissions of VOM during the seasonal allotment period, in accordance with 35 IAC 205.205(b) and 35 IAC 205.300.
- c. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period.

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01: Solvent Storage Tanks
Control 01: None

7.1.1 Description

Ten above ground, cylindrical, fixed roof tanks are used for the storage of solvent raw materials for use in the solvent compound process. All storage tanks have a capacity less than or equal to 36,000 gallons. Emissions of VOM and HAPs result from the loading and storage of raw materials.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
01 10 Solvent Storage Tanks	Storage Tank 42 5,000 Gal	None
	Storage Tank 69 36,000 Gal	
	Storage Tank 70 36,000 Gal	
	Storage Tank 71 36,000 Gal	
	Storage Tank 72 36,000 Gal	
	Storage Tank 73 11,000 Gal	
	Storage Tank 74 11,000 Gal	
	Storage Tank 75 15,000 Gal	
	Storage Tank 76 15,000 Gal	
	Storage Tank 77 11,000 Gal	

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected solvent storage tank" for the purpose of these unit-specific conditions, is each fixed roof tank with a design capacity less than 40,000 gallons and used to store solvents.
- b. An affected solvent storage tank shall comply with 35 IAC 218.129(f) which is addressed further in the recordkeeping requirement of Condition 7.1.9.
- c. The affected solvent storage tanks, 69, 70, 71, and 72 are subject to 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification occurred after July 23, 1984.
 - i. Storage Tanks 69, 70, 71 and 72 shall comply with 40 CFR 60.116b(c) which is addressed in Condition 7.1.9.

- d. Each affected storage tank is subject to 35 IAC 218.301, Use of Organic Material, which provides that: No person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, 218.304: If no odor nuisance exists, the limitation shall apply only to photochemically reactive material [35 IAC 218.301].

7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected solvent storage tanks not being subject to 35 IAC 218.120 due to the exemption listed in 218.119(g), the solvent storage tanks have a capacity less than 40,000 gallons.
- b. This permit is issued based on the affected solvent storage tanks not being subject to 35 IAC 218.122 due to the exception listed in 218.122(c), if no odor nuisance exists the limitations of this Section 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).
- c. This permit is issued based on the affected solvent storage tanks not being subject to 40 CFR 60.112b because the true vapor pressure is less than 27.6 kPa, and the capacity of each tank is less than 151m³.
- d. This permit is issued based on the affected solvent storage tanks not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected solvent storage tanks do not use an add-on control device to achieve compliance with an emission limitation or standard.
- e. This permit is issued based on the affected storage tanks 42, and 73-77 not being subject to 40 CFR 60, Subpart Kb, because the storage capacity of each tank is less than 75 m³.

7.1.5 Operational and Production Limits and Work Practices.

The Permittee shall operate with the following requirements pursuant to Section 39.5(7) (a) of the Act:

- a. The affected solvent storage tanks shall only be used to store liquids that do not have an odor nuisance and that have a vapor pressure less than 2.5 psia at 70°F

7.1.6 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.

7.1.7 Operating Requirements

None

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items to demonstrate compliance with conditions 5.5.1 and 7.1.3, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee of an affected solvent storage tank shall maintain readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel [35 IAC 218.129(f)].
- b. The overall throughput of the group of affected solvent storage tanks, gal/mo and gal/yr.
- c. The overall annual VOM and HAP emissions from the group of affected solvent storage tanks based on the material stored, the overall tank throughputs, and the applicable emission factors and formulas with supporting calculations.
- d. Except as provided in 40 CFR 60.116b(f) and (g), the Permittee of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period [40 CFR 60.116b(c)].
- e. For odor complaints, the date, time, and name of person(s) making complaint.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the affected solvent storage tanks 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:

Report of Deviations:

If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences [Section 39.5(7)(f)(ii) of the Act].

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.1.12 Compliance Procedures

Compliance with the VOM emissions limits in condition 5.5.1 and 5.5.3 shall be based on the recordkeeping requirements in condition 7.1.9 and the emission factors and formula listed below:

For the purpose of estimating VOM emissions from each affected tank, the most recent USEPA TANKS program or the methodology in AP-42 for Liquid Storage Tank emissions shall be used. The AP-42 method for fixed roof tanks is as follows (note, equations are from AP-42, 5th edition, September 1997, Section 7.1.3.1):

$$\text{Total Losses: } L_T = L_S + L_W \quad (\text{AP-42, Eqn. 1-1})$$

Where:

L_T = Total losses for period, lbs

L_S = standing storage losses for period, lbs

L_W = working losses for period, lbs

$$\text{Standing storage losses, } L_S = V_V W_V K_E K_S D_p \quad (\text{AP-42, Eqn. 1-2})$$

Where:

V_V = vapor space volume, ft^3

W_V = vapor density, lb/ft^3

K_E = vapor space expansion factor, dimensionless

K_S = vented vapor saturation factor, dimensionless

D_p = Days in period

For vertical fixed roof tanks, $V_V =$

$$V_V = \pi/4 D^2 H_{vo} \quad (\text{AP-42, Eqn. 1-3})$$

Where

D = diameter, ft

H_{vo} = vapor space outage, ft (as a default, use 1/2 of tank height)

$$W_V = M_V P_{VA} / (RT_{LA}) \quad (\text{AP-42, Eqn. 1-9})$$

Where

M_V = vapor molecular weight, $\text{lb}/\text{lb-mol}$

P_{VA} = Vapor pressure at daily average liquid surface temperature

R = ideal gas constant, $10.731 \text{ psia-ft}^3/(\text{lb-mol } ^\circ\text{R})$

T_{LA} = daily average liquid surface temperature ($^\circ\text{R}$)

$$M_V = \sum M_i y_i = \sum M_i (P x_i / P_{VA}) \quad (\text{AP-42, Eqn. 1-10})$$

Where

M_i = Molecular weight of constituent i , $\text{lb}/\text{lb-mol}$

y_i = vapor mole fraction constituent i

P = true vapor pressure of constituent i

x_i = liquid mole fraction constituent i

$$P_{VA} = \text{total vapor pressure of liquid} = \sum P x_i \quad (\text{AP-42, Eqn. 1-11})$$

For unknown daily average liquid surface temperatures, such as for outdoor tanks:

$$T_{LA} = 0.44 T_{AA} + 0.56 T_B + 0.0079 \alpha I \quad (\text{AP-42, Eqn. 1-13})$$

Where:

T_{AA} = daily average ambient temperature, °R

T_B = liquid bulk temperature, °R

α = tank paint solar absorptance, dimensionless, (AP-42 Table 7.1-6)

I = daily total solar insolation factor, Btu/ft²-day, (AP-42 Table 7.1-7)

and:

$$T_{AA} = (T_{AX} + T_{AN}) / 2 \quad (\text{AP-42, Eqn. 1-14})$$

T_{AX} = daily maximum ambient temperature, °R, (AP-42 Table 7.1-7)

T_{AN} = daily minimum ambient temperature, °R, (AP-42 Table 7.1-7)

and:

$$T_B = T_{AA} + 6\alpha - 1 \quad (\text{AP-42, Eqn. 1-15})$$

$$K_E = (\Delta T_V / T_{LA}) + (\Delta P_V - \Delta P_B) / (P_A - P_{VA}) \quad (\text{AP-42, Eqn. 1-16})$$

Where:

ΔT_V = Daily vapor temperature range, °R

T_{LA} = Daily average liquid surface temperature (AP-42, Eqn. 1-13)

ΔP_V = Daily vapor pressure range, psi

ΔP_B = Breather vent pressure vent setting range, psi,
= (breather vent pressure - breather vent vacuum setting, psig)

P_A = Atmospheric pressure, psia

P_{VA} = Total vapor pressure of liquid at daily average liquid surface temperature = $\sum P x_i$

and:

$$\Delta T_V = 0.72 \Delta T_A + 0.028 \alpha I \quad (\text{AP-42, Eqn. 1-17})$$

$$\Delta T_A = T_{AX} - T_{AN} \quad (\text{AP-42, Eqn. 1-21})$$

$$\Delta P_V = P_{VX} - P_{VN} \quad (\text{AP-42, Eqn. 1-18})$$

P_{VX} = Vapor pressure at daily maximum liquid surface temperature, T_{LX}

P_{VN} = Vapor pressure at daily minimum liquid surface temperature, T_{LN}

(Calculate vapor pressures using AP-42, Eqn. 1-11)

$$T_{LX} = T_{LA} + 0.25\Delta T_V$$

$$T_{LN} = T_{LA} - 0.25\Delta T_V$$

$$K_S = 1 / (1 + 0.053 P_{VA} H_{VO})$$

$$\text{Working losses, } L_W = 0.0010 M_V P_{VA} Q K_N K_P \quad (\text{AP-42, Eqn. 1-23})$$

Where:

M_V = Vapor molecular weight, lb/lb-mol (AP-42, Eqn. 1-10)

P_{VA} = Total vapor pressure of liquid at daily average liquid temperature (see AP-42, Eqn. 1-11)

Q = Throughput during period, barrels

K_N = Turnover factor, dimensionless

For turnovers > 36 , $K_N = (180 + N)/6N$

For turnovers < 1 , $K_N = 1$

Where $N = 5.614Q/\text{Tank capacity}$ (AP-42, Eqn. 1-24)

K_P = Working loss product factor, dimensionless
= 1 for all organic liquids except crude oil

- 7.2 Unit 02: Banbury Mixer
Control 02: Dust Collector

7.2.1 Description

The Banbury Mixer includes all associated materials handling and automation equipment. Rubber is compounded in the mixer with fillers and additives. The mixer process is controlled by a dust collector.

7.2.2 List of Emission Equipment and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
02 Banbury Mixer	Compound Formulation Process Including the Banbury Mixer and All Associated Materials Handling and Automation Equipment.	Dust Collector, Fabric Filters

7.2.3 Applicability Provisions and Applicable Regulations

a. An "affected mixer" for the purpose of these unit-specific conditions, is each mixer used for the compounding of rubber with fillers and other additives.

b. The affected mixer is subject to 35 IAC 212.322, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process 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 (see also Attachment 2) [35 IAC 212.322(a)].

c. The affected Banbury Mixer is subject to the requirements of 35 IAC 218.301, which provides that:

No person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission unit. If no odor nuisance exists the limitation shall apply only to photochemically reactive material. [35 IAC 218.301]

7.2.4 Non-Applicability of Regulations

This permit is issued based on the affected Banbury Mixer not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected Banbury Mixer does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.5 Operational and Work Practice Requirements

The Permittee shall operate with the following requirements pursuant to Section 39.5 (7) (a) of the Act:

- a. The Permittee shall follow good operating practices for the baghouse and mixer dust filter system including periodic inspection, routine maintenance, repair of defects and visual emission checks.
- b. The Permittee shall use good air pollution control practices to minimize emissions from the affected mixer.
- c. The Permittee shall maintain a plan of good operating practices and maintenance procedures to be amended as needed.

7.2.6 Emission Limitations

See condition 5.5.3(b).

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items to demonstrate compliance with conditions 5.5.1, 5.5.2, and 5.5.3, pursuant to Section 39.5(7) (b) of the Act:

- a. The Permittee shall maintain records of the following items for the affected mixer.
 - i. Production of solvent-based sealing compounds (lbs/month and lbs/year).
 - ii. A log of all maintenance activities for the dust collector and fabric filters.

- b. The Permittee shall maintain the following records for the affected mixer related to emissions:
- i. The emissions of VOM and HAP for production of product, tons/month, during each month, based on the actual throughput of product and emission factors of Draft AP-42 Table 4.12-4 (using only compound #6, or compound #7 as appropriate) of AP-42 Volume I, 5th edition, Chapter 4 "Evaporation Loss Sources" of June, 1999 or a more recent edition.
 - ii. A log identifying each batch of material for which the above calculations is not believed to fully account for VOM emissions, with explanation and estimate of additional VOM and HAP emissions in pounds (lb) resulting from such batch due to unique circumstances.
 - iii. VOM and HAP emissions tons/year, 12-month running total, based on the above data with supporting calculations.
 - iv. The Permittee shall maintain records for monthly and annual VOM emissions for the affected mixer and other related operations (solvent, storage, load-out and packaging, and solvent weigh tanks) to demonstrate compliance with Condition 5.5.1, 5.5.2, and 5.5.3.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the affected Banbury mixer 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:

Report of Deviations:

If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences [Section 39.5(7)(f)(ii) of the Act].

7.2.11 Operational Flexibility

None

7.2.12 Compliance Procedures

- a. Compliance with conditions 7.2.3(b) and 7.2.3(c) is demonstrated by the work practice requirements of condition 7.2.5, by the recordkeeping requirements of 7.2.9, and by the reporting requirements of condition 7.2.10.
- b. Compliance with VOM and HAP limitations of condition 5.5.1 and 5.5.2, and VOM limitations of Condition 5.5.3 are demonstrated by the record keeping requirements of 7.2.9 (b) (i) (based on the actual throughput of product and emission factors of Draft AP-42 Table 4.12-4 using only compound #6, or compound #7 as appropriate of AP-42 Volume I, 5th edition, Chapter 4 "Evaporation Loss Sources" of June, 1999 or a more recent edition), and by the reporting requirements of Condition 7.2.10.
- c. Compliance with the PM limitation of condition 5.5.1 is demonstrated by the work practices requirements of condition 7.2.5 and the reporting requirements of Condition 7.2.10.

- 7.3 Unit 03: Solvent Based Compound (SLC) Mixers and Duo-Mode Solvent/Solution Polymer (RM) Mixer SW6.
 Control 03: None on Solvent Mixers including SW6 when in SLC mode. (A Solution Polymer Dust Collector is on SW6 when in Solution Polymer Mixer mode.)

7.3.1 Description

The Mixers produce semi-finished solvent compounds on a batch basis. During the loading process solvents, rubber, resins and other materials are added to the solvent mixers. Materials are added to the mixers in batch charges.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
03 Solvent Lining Compound (SLC) Solvent Mixers & SLC/RM Duo-Mode Mixer & Solvent Base. Compound Process (SW) Struthers Wells Mixers	SLC Mixer SW0	None
	SLC Mixer SW1	None
	SLC Mixer SW2	None
	SLC Mixer SW3	None
	SLC Mixer SW4	None
	SLC Mixer SW5	None
	(SLC Mode) Mixer SW6 (Duo-Mode Mixer)	None
	(RM Mode) Mixer SW6 (Duo-Mode Mixer)	Dust Collector (Manway Hood Exhaust Filter)
	SW Mixer SW7	None
SW Mixer SW8	None	

7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected mixer" for the purpose of these unit-specific conditions, is each mixer, including loading operations, for the mixing of solvent compounds.
- b. The affected mixers SW0, SW1, SW2, SW4, and SW5 ARE subject to 35 IAC 212.322 which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any existing process emission source which, either alone or in combination with the emission of particulate matter from all other similar new or existing process emission sources at a plant or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (see also Attachment 2) [35 IAC 212.322].

- c. The affected mixers SW3, SW6, SW7, and SW8 are subject to 35 IAC 212.321 which provides that:

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

- d. Each affected mixer is subject to the requirements of 35 IAC 218.301, which provides that:

No person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission unit. If no odor nuisance exists the limitation shall apply only to photochemically reactive material. [35 IAC 218.301] Since these units do not have VOM control equipment, the alternative provision of 35 IAC 218.302 is not applicable.

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected mixers are not subject to 35 IAC 218 subpart QQ, miscellaneous formulation manufacturing processes, pursuant to 35 IAC 218.940 (h), which states; the control requirements of this Subpart shall not apply to the solvation mixers at the container sealant manufacturing facility located at 6050 West 51st Street in Chicago, Illinois.
- b. This permit is issued based on the affected mixer SW6 (in RM Mode) not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected mixers does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.3.5 Operational and Production Limits and Work Practices

The Permittee shall operate with the following requirements pursuant to Section 39.5 (7) (a) of the Act:

- a. The Permittee shall follow good operating practices for the baghouse and mixer dust filter system including periodic inspection, routine maintenance, repair of defects and visual emission checks.

- b. Annual production for the affected solvent mixers, in total, shall not exceed 2 million pounds per month and 16 million pounds per year of solvent based can sealant (SLC mode), and shall not exceed 1 million pounds per month and 7 million pounds per year of solution polymer (solution polymer mode).
- c. The Permittee shall use good air pollution control practices to minimize emissions from affected mixers.

7.3.6 Emission Limitations

- a. Emissions from the SW6 Duo-mode mixer when in the RM mode shall not exceed the following limits.

Pollutant	Emissions		Underlying Rules
	(Tons/Mo)	(Tons/Year)	
VOM	0.6	3.21	35 IAC Part 203

The limits on VOM are limitations established in Permit 02010039, 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. See Condition 7.1.6, 7.2.6, 7.3.6, and 7.4.6. [T1]

- b. See also Condition 5.5.3(b).

7.3.7 Operating Requirements

None

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items to demonstrate compliance with conditions 5.5.1, 5.5.2, and 5.5.3, and pursuant to Section 39.5(7) (b) of the Act:

- a. The Permittee shall maintain a file for the affected mixers that includes:

The VOM and HAP content of raw materials used in production of sealants. This information may be obtained from MSDS.

- b. The Permittee shall maintain records of the following items for the affected mixers.
 - i. Production of solvent-based sealing compounds (lbs/month and lbs/year).
 - ii. Solvent usage (lbs/month and lbs/year).
- c. The Permittee shall maintain the following records for the affected mixers related to emissions:
 - i. The emissions of VOM and HAP for production of sealant, tons/month, during each month, based on the actual throughput of solvent during the month produced including cleanup, with supporting documentation and calculation using the Emission Inventory Improvement Program (EIIP) method.
 - ii. A log identifying each batch of material for which the above calculations is not believed to fully account for VOM emissions, with explanation and estimate of additional VOM and HAP emissions in pounds (lb) resulting from such batch due to unique circumstances.
 - iii. VOM and HAP emissions tons/year, 12-month running total, based on the above data with supporting calculations.
 - iv. The Permittee shall maintain records for monthly and annual VOM emissions for the affected mixers and other related operations (solvent, storage, load-out and packaging, and solvent weigh tanks) to demonstrate compliance with Conditions 5.5.1, 5.5.2, and 5.5.3.

7.3.10 Reporting Requirements

The Permittee shall notify the Illinois EPA, Compliance Section of deviations with the control and operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.3.12 Compliance Procedures

- a. Emissions of VOM and HAP shall be calculated as follows:

Emissions of VOM and HAP shall be calculated using the methodology in U.S. EPA's Emission Inventory Improvement Program (EIIP) Document, Volume II, Chapter 8, "Preferred and Alternate Methods for Estimating Emissions from Paint and Ink Manufacturing", March 2002.

For Mixer Filling Emissions (EIIP equation 8.4-1):

$$E_{\text{VOC}} = 12.46 * S * P * M * Q / T$$

Where:

- E_{VOC} = Total VOC loading/filling emissions (lbs/period)
- S = Saturation factor (dimensionless); see Table 5.2-1 in AP-42
- P = Vapor pressure of the material loaded at temperature T (psia)
- M = Vapor molecular weight (lb/lb-mol)
- Q = Volume loaded of material (1,000 gallons/period)
- T = Temperature of material loaded ($^{\circ}\text{R}$)

Where multiple solvents are used, vapor pressure (P) is calculated:

$$P = \sum P_x \quad (\text{EIIP equation 8.4-2})$$

Where:

P_x = Partial pressure of VOC species x (psia) using Raoult's law:

$$P_x = m_x * VP_x \quad (\text{EIIP equation 8.4-3})$$

and:

m_x = Liquid mole fraction of VOC species x (mole/mole)

VP_x = True vapor pressure of VOC species x (psia) and m_x is calculated by:

$$m_x = (z_x / M_x) / \sum (z_x / M_x) \quad (\text{EIIP Equation 8.4-5})$$

Where:

- z_x = Liquid mass fraction of VOC species x (lb/lb)
- M_x = Molecular weight of VOC species x (lb/lb-mole)

Where multiple solvents are used, vapor molecular weight (M) is calculated:

$$M = \sum (y_x * M_x) \quad (\text{EIIP equation 8.4-6})$$

Where:

y_x = Vapor mole fraction of VOC species x
(mole/mole)

M_x = Molecular weight of VOC species x (lb/lb-mol)

and:

$$y_x = P_x / P \quad (\text{EIIP equation 8.4-7})$$

Speciated HAP emissions are calculated using EIIP Equation

$$E_x = E_{\text{VOC}} * x_x \quad (\text{EIIP equation 8.4-8})$$

Where:

E_x = Filling emissions of VOC species x

x_x = Vapor mass fraction of species x (lb/lb VOC)

and:

$$x_x = (y_x * M_x) / M \quad (\text{EIIP equation 8.4-9})$$

For Mixer Heat-up Emissions (EIIP equation 8.4-10):

$$E_{\text{VOC}} = \frac{\sum (P_x)_{T1}}{14.7 - \sum (P_x)_{T1}} + \frac{\sum (P_x)_{T2}}{14.7 - \sum (P_x)_{T2}} * \Delta n * M_a \text{ CYC}$$

Where:

E_{VOC} = Total VOC heat-up emissions (lbs/period)

$(P_x)_{T1}$ = Initial partial pressure of each VOC species in the vessel head space at the initial temperature T1 (psia) (see EIIP equation 8.4-3, above)

$(P_x)_{T2}$ = Final partial pressure of each VOC species in the vessel head space at the final temperature T2 (psia) (see EIIP equation 8.4-3, above)

Δn = Number of lb-moles of gas displaced (lb-mole/cycle)

M_a = Average vapor molecular weight (lb/lb-mole)

CYC = Number of cycles per period

The term Δn is calculated:

$$\Delta n = V/R * (Pa_1/T1 - Pa_2/T2) \quad (\text{EIIP equation 8.4-11})$$

Where:

V = Volume of free space in vessel (ft³)

R = Universal gas constant at 1 atmosphere of pressure, 10.73 psia-ft³/lb-mol °R

Pa₁ = Initial gas pressure of the vessel
 $Pa_1 = 14.7 - \sum (P_x)_{T1}$ (EIIP equation 8.4-12)
 Where (P_x)_{T1} = Partial pressure of each VOC in the vessel headspace (psia) at the initial temperature T1 (see EIIP equation 8.4-3)

Pa₂ = Final gas pressure of the vessel
 $Pa_2 = 14.7 - \sum (P_x)_{T2}$ (EIIP equation 8.4-13)
 Where (P_x)_{T2} = Partial pressure of each VOC in the vessel headspace (psia) at the final temperature T2 (see EIIP equation 8.4-3)

T1 = Initial temperature of vessel, °R

T2 = Final temperature of vessel, °R

Speciated HAP emissions are calculated using EIIP Equation 8.4-14:

$$E_x = \frac{\frac{(P_x)_{T1}}{14.7 - (P_x)_{T1}} + \frac{(P_x)_{T2}}{14.7 - (P_x)_{T2}}}{2} * \Delta n * M_a * \text{CYC}$$

Where:

E_x = Species x emissions from heat-up (lbs/period)

(P_x)_{T1} = Initial partial pressure of each VOC species in the vessel head space at the initial temperature T1 (psia) (see EIIP equation 8.4-3, above)

(P_x)_{T2} = Final partial pressure of each VOC species in the vessel head space at the final temperature T2 (psia) (see EIIP equation 8.4-3, above)

Δn = Number of lb-moles of gas displaced (lb-mole/cycle) (see EIIP equation 8.4-11, above)

M_a = Average vapor molecular weight (lb/lb-mole)

CYC = Number of cycles per period

For Mixer Surface Evaporation Emissions (EIIP Equation 8.4-18):

$$E_x = \frac{M_x * K_x * A * P_x * 3600 * H}{R * T} * B$$

Where:

- E_x = Emissions of VOC species x (lbs/period)
- M_x = Molecular weight of VOC species x (lb/lb-mole)
- K_x = Gas phase mass transfer coefficient for VOC species x (ft/sec)
- A = Surface area of exposure or tank opening (ft²)
- P_x = Partial pressure of VOC species x at temperature T (psia) (see EIIP equation 8.4-3, above)
- 3600 = 3,600 seconds/hour
- H = Batch time (time mixer is open) (hour/batch)
- R = Universal gas constant at 1 atmosphere of pressure, 10.73 psia-ft³/R-lb mole
- T = Temperature of the liquid, °R (°F + 460)
- B = Number of batches per period (batches/period)

and:

$$K_x = 0.00438 * U^{0.78} * (18 / M_x)^{1/3} \quad (\text{EIIP Equation 8.4-17})$$

Where:

- U = Wind speed (mile/hour)
- M_x = Molecular weight of VOC species x (lb/lb-mole)

- b. Emissions of PM shall be calculated using a mass balance approach and emission factors from U.S. EPA's AP-42, Compilation of Air Pollutant Emission Factors Document.

For Addition of Particulate Emitting Solids without using a hood and particulate controls

$$E_{PM, fug.} = M * EF * (1 - 50 \text{ percent settling in building}) / (2,000 \text{ lb/ton})$$

Where:

$$E_{PM, fug.} = \text{Fugitive PM emissions (lbs/period)}$$

$$M = \text{Solids added (lbs/period)}$$

M can be estimated by multiplying the total mixer throughput by 50 percent, which is the typical product solids content

$$EF = \text{Emission factor (0.61 lbs PM/lbs solid - AP-42, Table 11.17-4, Product loading, enclosed truck)}$$

For Addition of Particulate Emitting Solids using a hood and particulate controls

$$E_{PM} = M * EF * [\text{Capture Eff.} * (1 - \text{Control Eff.}) + (1 - \text{Capture Eff.}) * (1 - 50 \text{ percent settling in building})] / (2,000 \text{ lb/ton})$$

Where:

$$E_{PM} = \text{Total PM emissions (lbs/period)}$$

$$M = \text{Solids added (lbs/period)}$$

M can be estimated by multiplying the total mixer throughput by 50 percent, which is the typical product solids content

$$EF = \text{Emission factor (0.61 lbs PM/lbs solid - AP-42, Table 11.17-4, Product loading, enclosed truck)}$$

$$\text{Eff.} = \text{Efficiency}$$

Hood capture efficiency is 99 percent
Filter control efficiency is 99.5 percent

- c. Compliance with condition 7.3.3(b) is demonstrated by the work practice requirements of condition 7.3.5, by the recordkeeping requirements of 7.3.9, and by the reporting requirements of condition 7.3.10.
- d. Compliance with VOM limitations of condition 5.5.1, 5.5.3, and 7.3.6 are demonstrated by the record keeping requirements of 7.3.9 and by the reporting requirements of Condition and 7.3.10.

- e. Compliance with the PM limitations of condition 5.5.1 and 7.3.6 are demonstrated by the work practices requirements of condition 7.3.5 and the reporting requirements of Condition 7.3.10.
- f. Compliance with HAP limitations of condition 5.5.2, are demonstrated by the record keeping requirements of 7.3.9 and by the reporting requirements of Condition and 7.3.10.

7.4 Unit 04: Solvent Blend/Storage Tanks.(BST) and Solvent Base Weigh Tanks (WT) Tanks

Control 04: None

7.4.1 Description

Ten indoor, above ground, horizontal, cylindrical, fixed roof tanks are used for blending and storage of SLC products, and two solvent base weigh tanks. Emission of VOM result from breathing and working losses.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
04 10 Solvent Blend/Storage Tanks & 2 Solvent Base Weigh Tanks	Blend/Storage Tank BST1	None
	Blend/Storage Tank BST2	
	Blend/Storage Tank BST3	
	Blend/Storage Tank BST4	
	Blend/Storage Tank BST5	
	Blend/Storage Tank BST6	
	Blend/Storage Tank BST7	
	Blend/Storage Tank BST8	
	Blend/Storage Tank BST9	
	Blend/Storage Tank BST10	
	Weigh Tank WT1	
	Weigh Tank WT2	

7.4.3 Applicability Provisions and Applicable Regulations

- a. An "affected solvent blend/storage tank" for the purpose of these unit-specific conditions, is each fixed roof tank with design capacity less than 40,000 gallons used to Blend/Store solvent products.
- b. Each affected solvent blend/storage tank must comply with 35 IAC 218.129(f) which is addressed in the recordkeeping requirement of Condition 7.4.9.
- c. An "affected solvent base weigh tank" for the purpose of these unit-specific conditions, is each weigh tank
- d. Each affected solvent blend/storage tank, and solvent base weigh tank is subject to the requirements of 35 IAC 218.301, which provides that:

No person shall cause or allow the discharge of more than 8 lbs/hr of organic material into the atmosphere from any emission unit. If no odor nuisance exists the limitation shall apply only to photochemically reactive material. [35 IAC 218.301]

7.4.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected solvent blend/storage tanks not being subject to 35 IAC 218.120 due to the exemption listed in 218.119(g), that is the solvent storage tanks have a capacity less than 40,000 gallons.
- b. This permit is issued based on the affected weigh tanks not being subject to 35 IAC 218.946 due to the exemption listed in 218.940(d): No limits under this Subpart shall apply to emission units with emissions of VOM to the atmosphere less than or equal to 2.3 Mg (2.5 tons) per calendar year if the total emissions from such emission units not complying with this Section does not exceed 4.5 Mg (5.0 tons) per calendar year. [35 IAC 218.940(d)]
- c. This permit is issued based on the affected tanks not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tanks do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.4.5 Operational and Production Limits and Work Practices.

None

7.4.6 Emission Limitations

See Condition 5.5.3(b).

7.4.7 Operating 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 each affected solvent blend/storage tank and each weigh tank to demonstrate compliance with conditions 5.5.1 and 7.4.3, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel [35 IAC 218.129(f)].

- b. The throughput of each affected solvent blend/storage tank and each weigh tank tons/month, and tons/yr.
- c. VOM and HAP emissions from each tank to demonstrate compliance with 7.4.3(d) and the exemption cited in condition 7.4.4(b) [see also condition 5.6.1(b)].

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the affected solvent blend storage tanks 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:

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.4.12 Compliance Procedures

- a. Compliance with the VOM emissions limits of Conditions 5.5.1, and 7.4.6. shall be based on the recordkeeping requirements in Condition 7.4.9, the reporting requirements of Condition 7.4.10, and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected tanks to determine compliance with Conditions 5.5.1, and 7.4.6, Version 3.1, 4.0 or the latest version of the TANKS program or the methodology in AP-42 for Liquid Storage Tank emissions is acceptable. Use AP-42 methodology as described in Condition 7.1.12, with the following additional description:

For horizontal fixed roof tanks (use DE in place of D, actual diameter):

$$DE = (\text{effective diameter}) = (LD / 0.785)0.5 \quad (\text{AP-42, Eqn. 1-5})$$

Where:

L = length of tank, ft

D = actual diameter, ft

HVO = $\frac{1}{2}$ D

Since the affected tanks are located indoors, use the following values:

$$TLA = 80 \text{ }^{\circ}\text{F} = 540 \text{ }^{\circ}\text{R}$$

$$\Delta TV = \text{daily vapor temperature range, } ^{\circ}\text{R} = 5 \text{ }^{\circ}\text{R}$$

- b. Compliance with the HAP emissions limits of Conditions 5.5.2 shall be based on the recordkeeping requirements in Condition 7.4.9, the reporting requirements of Condition 7.4.10.
- c. Compliance with conditions 7.4.3(b), and 7.4.3(d), is demonstrated by the record keeping requirements of 7.4.9, and by the reporting requirements of condition 7.4.10.
- d. Compliance with the non applicability requirement of 35 IAC 218.940(d) as stated in Condition 7.4.4(b), is demonstrated by the record keeping requirements of 7.4.9, and by the reporting requirements of condition 7.4.10.
- e. For the purpose of estimating VOM emissions from the affected tanks to determine compliance with the non applicability requirement of 35 IAC 218.940(d) as stated in Condition 7.4.4(b), Version 3.1, 4.0 or the latest version of the TANKS program or the methodology in AP-42 for Liquid Storage Tank emissions is acceptable. Use AP-42 methodology as described in Condition 7.1.12, with the following additional description:

For horizontal fixed roof tanks (use DE in place of D, actual diameter):

$$DE = (\text{effective diameter}) = (LD / 0.785)0.5$$

(AP-42, Eqn. 1-5)

Where:

L = length of tank, ft

D = actual diameter, ft

$$HVO = \frac{1}{2} D$$

Since the affected tanks are located indoors, use the following values:

$$TLA = 80 \text{ }^{\circ}\text{F} = 540 \text{ }^{\circ}\text{R}$$

$$\Delta TV = \text{daily vapor temperature range, } ^{\circ}\text{R} = 5 \text{ }^{\circ}\text{R}$$

7.5 Unit 05: Bulk and Non-Bulk Packaging
 Control 05: None

7.5.1 Description

The truck loading is the bulk packaging process of solvent-based can sealing. The Permittee operates one bulk loading station. The VOM emissions from the truck loading station are accounted for in the working losses, with the exception of fugitive emissions that are attributed to the components, i.e., valves, flanges, etc. associated with the truck loading. Non-bulk packaging processes involve the packaging of solvent based can sealing compounds into non-bulk packages such as drums, totes, pails, etc.

7.5.2 List of Emission Equipment and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
05 Packaging & SBNBP Packaging	Bulk Truck Loading	None
	Non-Bulk Packaging	None
	Solvent Base Non-Bulk Packaging (SBNBP) Station	None

7.5.3 Applicability Provisions

a. An "affected packaging source" for the purpose of these unit-specific conditions, is each bulk or non-bulk packaging of solvent based can sealing compounds.

b. An affected packaging source is subject to 35 IAC 218.301 which provides that:

No person shall cause or allow the discharge of more than 8 lb/hr of organic material into the atmosphere from any emission unit. If no odor nuisance exists these limitations shall apply only to photochemically reactive material [35 IAC 218.301].

7.5.4 Non-Applicable Regulations

a. This permit is issued based on the affected packaging source is not being subject to 35 IAC Part 218.122(a), because the affected packaging source does not have a throughput greater than 40,000 gallons per day.

b. This permit is issued based on the requirements of 35 IAC 218, Subpart QQ not applying to the bulk packaging process, pursuant to 35 IAC 218.940(a)(2) and (b)(2), as the bulk packaging process is included in the category of emission units specified in 35 IAC 218, Subpart B, Storage and Loading Operations.

- c. This permit is issued based on the non-bulk packaging processes not being subject to the limits of 35 IAC Subpart QQ, due to the exemption listed in 218.940(d), that no limits under Subpart QQ shall apply to emission units with emissions of VOM to the atmosphere less than or equal to 2.3 Mg (2.5 tons) per calendar year if the total emissions from such emission units not complying with 35 IAC 218.940 do not exceed 4.5 Mg (5.0 tons) per calendar year. The emissions from non-bulk packaging process are less than 2.5 tons per calendar year.

7.5.5 Operational Limits and Work Practices

None

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, emissions from non-bulk packaging shall not exceed 2.5 tons per year.

7.5.7 Operating Requirements

None

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for each affected packaging source to demonstrate compliance with Condition 7.5.4 and 7.5.6 pursuant to Section 39.5(7)(b) of the Act.

- a. Annual material throughput to the bulk loading station; and
- b. VOM and HAP emissions, in tons/month and tons/year.

7.5.10 Reporting Requirements

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

7.5.11 Operational Flexibility/ Anticipated Operating Scenarios

None

7.5.12 Compliance Procedures

- a. Compliance with Condition 7.5.3(b) is demonstrated by the recordkeeping and reporting requirements of Conditions 7.5.9 and 7.5.10.
- b. Compliance with the VOM emissions limits of Conditions 5.5.1, and 7.5.6. shall be based on the recordkeeping requirements in Condition 7.5.9, the reporting requirements of Condition 7.5.10, and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected tanks to determine compliance with Conditions 5.5.1 and 7.5.6, the following calculation method in AP-42, Section 5.2.2.1.1 for vessel loading is acceptable.

$$E_{VOC} = \frac{12.46 * S * P * M * Q}{T}$$

Where:

E_{VOC} = Total VOC/VOM loading emissions per period

S = Saturation factor; see AP-42 Table 5.2-1

P = Vapor pressure of the material loaded at temperature T (psia)

M = Vapor molecular weight (lb/lb-mole)

Q = Volume of material loaded (1,000 gal/period)

T = Temperature of liquid loaded (°R)

- c. Compliance with the HAP emissions limits of Conditions 5.5.2 shall be based on the recordkeeping requirements in Condition 7.5.9, and the reporting requirements of Condition 7.5.10.

7.6 Unit 06: RAK Tank
Control 06: None

7.6.1 Description

Demister solution or other similar miscellaneous materials are produced in the RAK tank.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
06 RAK TANK	SLC RAK	None

7.6.3 Applicability Provisions and Applicable Regulations

a. An "affected RAK tank" for the purpose of these unit-specific conditions, is each tank used to produce demister solutions or other similar miscellaneous materials.

b. An affected RAK tank is subject to 35 IAC 218.301 which provides that:

No person shall cause or allow the discharge of more than 8 lb/hr of organic material into the atmosphere from any emission unit. If no odor nuisance exists these limitations shall apply only to photochemically reactive material. [35 IAC 218.301]

7.6.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected RAK tank not being subject to 35 IAC 218.946 pursuant to 35 IAC 218.940(d) which provides that:

No limits under 35 IAC 218.940 shall apply to emission units with emissions of VOM to the atmosphere less than or equal to 2.3 Mg (2.5 tons) per calendar year if the total emissions from such emission units not complying with 35 IAC 218.940 does not exceed 4.5 Mg (5.0 tons) per calendar year [35 IAC 218.940(d)].

b. This permit is issued based on the affected tanks not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tanks do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.6.5 Operational and Production Limits and Work Practices

None

7.6.6 Emission Limitations

None

7.6.7 Operating Requirements

None

7.6.8 Inspection Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected RAK tank to demonstrate compliance with conditions 5.5.1 and 7.6.3, pursuant to Section 39.5(7)(b) of the Act:

- a. The throughput of the affected RAK tank, gal/mo and gal/yr.
- b. Annual VOM and HAP emissions in tons.
- c. For odor complaints, the date, time, and name of person(s) making such complaint.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the affected RAK 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.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.6.12 Compliance Procedures

- a. Compliance with conditions 7.6.3(b), is demonstrated by the record keeping requirements of 7.6.9, and by the reporting requirements of condition 7.6.10.
- b. Compliance with the VOM emissions limits of Conditions 5.5.1, shall be based on the recordkeeping requirements in Condition 7.6.9, the reporting requirements of Condition 7.6.10, and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from each affected tank, the most recent USEPA TANKS program or the methodology in AP-42 for Liquid Storage Tank emissions shall be used. The AP-42 method for fixed roof tanks is as follows (note, equations are from AP-42, 5th edition, September 1997, Section 7.1.3.1):

$$\text{Total Losses: } L_T = L_S + L_W \quad (\text{AP-42, Eqn. 1-1})$$

Where:

L_T = Total losses for period, lbs

L_S = Standing storage losses for period, lbs

L_W = Working losses for period, lbs

$$\text{Standing storage losses, } L_S = V_V W_V K_E K_S D_p \quad (\text{AP-42, Eqn. 1-2})$$

Where:

V_V = Vapor space volume, ft^3

W_V = Vapor density, lb/ft^3

K_E = Vapor space expansion factor, dimensionless

K_S = Vented vapor saturation factor, dimensionless

D_p = Days in period

For vertical fixed roof tanks, $V_V =$

$$V_V = \pi/4 D^2 H_{v_o} \quad (\text{AP-42, Eqn. 1-3})$$

Where

D = Diameter, ft

H_{v_o} = Vapor space outage, ft (as a default, use $\frac{1}{2}$ of tank height)

$$W_V = M_V P_{VA} / (RT_{LA}) \quad (\text{AP-42, Eqn. 1-9})$$

Where

M_V = Vapor molecular weight, $\text{lb}/\text{lb-mol}$

P_{VA} = Vapor pressure at daily average liquid surface temperature

R = Ideal gas constant, $10.731 \text{ psia-ft}^3/(\text{lb-mol } ^\circ\text{R})$

T_{LA} = daily average liquid surface temperature ($^\circ\text{R}$)

$$M_v = \sum M_i y_i = \sum M_i (P x_i / P_{VA}) \quad (\text{AP-42, Eqn. 1-10})$$

Where

M_i = Molecular weight of constituent i , lb/lb-mol

y_i = Vapor mole fraction constituent i

P = True vapor pressure of constituent i

x_i = Liquid mole fraction constituent i

P_{VA} = Total vapor pressure of liquid = $\sum P x_i$ (AP-42, Eqn. 1-11)

For unknown daily average liquid surface temperatures, such as for outdoor tanks:

$$T_{LA} = 0.44 T_{AA} + 0.56 T_B + 0.0079 \alpha I \quad (\text{AP-42, Eqn. 1-13})$$

Where:

T_{AA} = Daily average ambient temperature, °R

T_B = Liquid bulk temperature, °R

α = Tank paint solar absorptance, dimensionless, (AP-42 Table 7.1-6)

I = Daily total solar insolation factor, Btu/ft²-day, (AP-42 Table 7.1-7)

and:

$$T_{AA} = (T_{AX} + T_{AN}) / 2 \quad (\text{AP-42, Eqn. 1-14})$$

T_{AX} = Daily maximum ambient temperature, °R, (AP-42 Table 7.1-7)

T_{AN} = Daily minimum ambient temperature, °R, (AP-42 Table 7.1-7)

and:

$$T_B = T_{AA} + 6\alpha - 1 \quad (\text{AP-42, Eqn. 1-15})$$

$$K_E = (\Delta T_v / T_{LA}) + (\Delta P_v - \Delta P_B) / (P_A - P_{VA}) \quad (\text{AP-42, Eqn. 1-16})$$

Where:

ΔT_v = Daily vapor temperature range, °R

T_{LA} = Daily average liquid surface temperature (AP-42, Eqn. 1-13)

ΔP_V = Daily vapor pressure range, psi

ΔP_B = Breather vent pressure vent setting range, psi,
= (breather vent pressure - breather vent vacuum setting, psig)

P_A = Atmospheric pressure, psia

P_{VA} = Total vapor pressure of liquid at daily average liquid surface temperature = $\sum P x_i$

and:

$\Delta T_V = 0.72 \Delta T_A + 0.028 \alpha I$ (AP-42, Eqn. 1-17)

$\Delta T_A = T_{AX} - T_{AN}$ (AP-42, Eqn. 1-21)

$\Delta P_V = P_{VX} - P_{VN}$ (AP-42, Eqn. 1-18)

P_{VX} = Vapor pressure at daily maximum liquid surface temperature, T_{LX}

P_{VN} = Vapor pressure at daily minimum liquid surface temperature, T_{LN}

(Calculate vapor pressures using AP-42, Eqn. 1-11)

$T_{LX} = T_{LA} + 0.25\Delta T_V$

$T_{LN} = T_{LA} - 0.25\Delta T_V$

$K_S = 1 / (1 + 0.053 P_{VA} H_{VO})$

Working losses, $L_W = 0.0010 M_V P_{VA} Q K_N K_p$ (AP-42, Eqn. 1-23)

Where:

M_V = Vapor molecular weight, lb/lb-mol (AP-42, Eqn. 1-10)

P_{VA} = Total vapor pressure of liquid at daily average liquid temperature (see AP-42, Eqn. 1-11)

Q = Throughput during period, barrels

K_N = turnover factor, dimensionless

For turnovers > 36 , $K_N = (180 + N) / 6N$

For turnovers < 1 , $K_N = 1$

Where $N = 5.614Q / \text{Tank capacity}$ (AP-42, Eqn. 1-24)

K_p = Working loss product factor, dimensionless
= 1 for all organic liquids except crude oil

7.7 Unit 07: Gas Fired Boilers
 Control 07: None

7.7.1 Description

The boilers combust natural gas to produce steam for heating.

7.7.2 List of emission equipment and pollution control equipment

Plant Emission Unit	Description	Firing Rate/Hour	Emission Control
07 Natural Gas Fired Boilers	North American B1	12.6 mmBtu	None
	Cleaver Brooks B2	6.3 mmBtu	None
	Ray B3	5.0 mmBtu	None
	Ray B4	5.0 mmBtu	None

7.7.3 Applicable Regulations

- a. An "affected boiler" for the purpose of these unit-specific conditions, is each piece of equipment listed in Condition 7.7.2.
- b. Affected boiler B1 is subject to 35 IAC 216.121 which provides that:

The emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.7.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected boilers not being subject to 35 IAC 218.301, pursuant to 35 IAC 218.303 which provide that:

The provisions of 35 IAC 218.301 shall not apply to fuel combustion emission units.
- b. The affected boilers B2, B3, and B4 are not subject to 35 IAC 216.121, because each of the boilers has a firing rate less than 2.9 MW (10 mmBtu/hr).

7.7.5 Operational and Production Limits and Work Practices

The Permittee shall operate with the following requirements pursuant to Section 39.5 (7) (a) of the Act:

Natural gas shall be the only fuel burned in an affected boiler.

7.7.6 Emission Limitations

None

7.7.7 Testing Requirements

None

7.7.8 Monitoring Requirements

None

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each of the affected boilers which allow to demonstrate compliance with Condition 5.5.1 and 7.7.5 pursuant to Section 39.5 (7) (b) of the Act:

- a. Total natural gas usage for the boilers (mcf/year)
- b. Annual Total NO_x, PM, SO₂, and VOM emissions from the affected boilers, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations with applicable requirements within 30 days pursuant to Section 39.5(7) (f) (ii) of the Act.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.7.12 Compliance Procedures

- a. Compliance provisions addressing Condition 7.7.3(b) are not set by this permit as compliance is demonstrated by the normal work practices and maintenance activities inherent in operation of natural gas fired boilers.
- b. Compliance with the emission limits in condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.7.9, reporting requirements in 7.7.10, and the emission factors and formulas listed below:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/10⁶ ft³)</u>
NO _x	100.0
PM	7.6
SO ₂	0.6
VOM	5.5
CO	84.0

These are the emission factors for uncontrolled natural gas combustion in small industrial boilers (< 100 mmBtu/hr), Tables 1.4.1 and 1.4.2, AP-42, Volume I, 5th Edition, March 1998 Revision.

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

7.8 Unit 08: Equipment Component Fugitive Emissions
Control 08: None

7.8.1 Description

Fugitive emissions from equipment components, such as valves, flanges, pumps, and Open End Lines (OELs), are generated during the movement of material through the piping distributed throughout the source.

7.8.2 List of Emission Equipment and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Equipment Components	Movement of Material Throughout the Source's Piping System	None

7.8.3 Applicability Provisions

- a. The "affected equipment components" for the purpose of these unit-specific conditions, is each piece of equipment listed in condition 7.8.1.
- b. The "affected equipment components" are subject to 35 IAC 218.142 which provides that:

No person shall cause or allow the discharge of more than 32.8 ml (2 cu in) of VOL with vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions.

7.8.4 Non-Applicable Regulations

- a. This permit is issued based on the affected equipment components not being subject to 35 IAC 218.143 and 218.144 because there are no safety relief valves or vapor blowdown systems at the facility.

7.8.5 Operational and Production Limits and Work Practices

The Permittee shall operate with the following requirements pursuant to Section 39.5 (7) (a) of the Act:

The Permittee shall follow good air pollution practices to minimize emissions from affected components.

7.8.6 Emission Limitations

None

7.8.7 Testing Requirements

None

7.8.8 Monitoring Requirements

None

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items to demonstrate compliance with conditions 5.5.1 and 7.8.3, pursuant to Section 39.5(7) (b) of the Act:

- a. The Permittee shall maintain a file of the following items for the affected components at the source.

An inventory of the number of each of the affected components at the source for the various department or areas at the source.

- b. The Permittee shall maintain the following records related to the emissions of affected components.

Monthly and annual VOM and HAP emissions in tons, with supporting calculations.

7.8.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations with applicable requirements within 30 days pursuant to Section 39.5(7) (f) (ii) of the Act.

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to these units without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 210.102:

Addition, replacement or removal of affected components associated with product lines and process equipment that is permitted.

7.8.12 Compliance Procedures

- a. Compliance with the emission limits in condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.8.9, reporting requirements in 7.8.10, and the emission factors and formulas listed below:

Monthly and yearly VOM emissions from equipment components shall be determined as follows:

VOM emissions = number of hours operated x number of components x SOCMI Non-Leaking Emission Factor*

Where:

The "number of hours operated" of equipment components is estimated to be 870 hours per year based on historical data that indicates components are in use approximately 10% of the time. (i.e. 10% of 8760 possible annual hours)

and

Where:*

Components	SOCMI Non-Leaking Emission Factor
Valves	0.0038**
Flanges	0.00013
Pumps	0.0264
OELs	0.00013

** SOCMI Non-Leaking Emission Factors are in units of lb. Emitted per component per hours of operation.

7.9 Unit 09: Sodasorb® Process (ASP) Equipment
Control: Dust Collectors

7.9.1 Equipment used to manufacture, package, and store Sodasorb® Product.

The Sodasorb® Process consists of extruding a mixture of primarily water, hydrated lime, and caustic onto a conveyor belt. The belt feeds to a natural gas fired oven that removes moisture from the product. The product is then passed through a crusher and sifter before passing onto a weigh/wetting belt and into storage bins. Product that is rejected by the sifter is recycled back to a fines recycle baghouse and bins prior to being fed into a mixer. Particulate emissions from the process are vented to a dust collector.

7.9.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
09 ASP Sodasorb® Process Equipment	Baghouse-CB1	None
	Lime Storage Silo-A1	None
	Baghouse-CB2	None
	Lime Bin-A2	None
	Mixer-A3	None
	Oven-A4 (6.09 mmBtu/hr)	None
	Crusher-A5	CB4 Main Dust Collector 1
	Sifter-A6	
	Pulverizer-A7	
	CB5 Fines Recycle Baghouse	None
	CB3 Fines Baghouse	None
	REG Fines Bin-A13	None
	IND Fines Bin-A14	None
	Weigh Belt/Wetting Belt Conveyer-A8	CB6 Main Dust Collector 2
	Product Storage Bins-A9	
	Pre-Pak Machines-A10	
	Canister Pack Machine-A11	
Bulk Packaging-A12		
Overhead Conveyer Transfer Points		

7.9.3 Applicability Provisions and Applicable Regulations

- a. The "affected Sodasorb® Process Equipment" for the purpose of these unit-specific conditions, is each piece of equipment as listed in condition 7.9.2 above.

- b. Each piece of equipment as listed in condition 7.9.2 above is subject to emission limits identified in Condition 5.2.2.
- c. Each piece of equipment as listed in condition 7.9.2 above is subject to 35 IAC 212.321 which provides that:

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

7.9.4 Non-Applicability of Regulations of Concern

- a. The affected oven-A4 is not subject to 35 IAC 212.122, 216.121 and 217.121 since its maximum firing rate is less than 10 mmBtu per hour heat input capacity.
- b. The affected oven-A4 is not subject to 35 IAC 218.301 and 218.302 as fuel combustion emission units are exempt under 35 IAC 218.303.
- c. This permit is issued based on the affected Sodasorb® Process Equipment not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because:
 - i. The affected equipment with a control device does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.
 - ii. All other affected equipment does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.9.5 Operational and Work Practice Requirements

The Permittee shall operate with the following requirements pursuant to Section 39.5 (7) (a) of the Act:

- a. The Permittee shall follow good operating practices for each piece of equipment as listed in condition 7.9.2, including periodic inspection, routine maintenance, repair of defects and visual emission checks of each baghouse and each dust filter system.

- b. Natural gas shall be the only fuel fired in the affected oven.

7.9.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected Sodasorb® Process Equipment is subject to the following:

- a. Particulate matter emissions from the affected emission units combined shall not exceed 0.20 lb/hour and 0.9 tons/year. [T1]
- b. Emissions from the affected Oven-A4 shall not exceed the following limitations:

Pollutant	Emissions		Underlying Rules
	(Lb/Hr)	(Tons/Yr)	
NO _x	0.60	2.61	35 IAC Part 203
CO	0.50	2.21	35 IAC Part 203

The limits on PM, NO_x, and CO are limitations established in Permit 02010039, 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 40 CFR 52.21. [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

7.9.7 Testing Requirements

None

7.9.8 Monitoring Requirements

None

7.9.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected Piece of Sodasorb® Process Equipment to demonstrate compliance with Conditions 5.5.1 and 7.9.6, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain a file of the following for the affected process:

Maximum firing rate of the burners in the affected oven.

- b. The Permittee shall maintain the following operating records:

Operating hours of the affected Sodasorb® Process Equipment, hours/month and hours/year.

- c. The Permittee shall keep an inspection and maintenance log for each affected baghouse and dust collector.

- d. The Permittee shall maintain the following emission records:

Emissions of particulate matter (lb/mo and lb/yr) with supporting calculations.

Emissions of NO_x and CO for the affected oven A4 (tons/mo and tons/year).

7.9.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected Sodasorb® Process Equipment 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:

Exceedance of the limits of condition 7.9.6

7.9.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.9.12 Compliance Procedures

- a. Compliance with conditions 7.9.3(b), is demonstrated by the record keeping requirements of 7.9.9, and by the reporting requirements of condition 7.9.10.
- b. Compliance with the particulate matter limitations of Condition 7.9.6 is demonstrated by the recordkeeping requirements of Conditions 7.9.9, and the reporting requirements of Condition 7.9.10.
- c. Compliance with the VOM, SO₂, PM, and NO_x limitations in Condition 5.5.1, and the NO_x and CO limitations of Condition 7.9.6 is demonstrated by the recordkeeping requirements of Conditions 7.9.9, the reporting requirements of condition 7.9.10, and by the emission factors and formulas listed below:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/10⁶ ft³)</u>
NO _x	100.0
PM	7.6
SO ₂	0.6
VOM	5.5
CO	84.0

These are the emission factors for uncontrolled natural gas combustion in small industrial boilers (<100 mmBtu/hr), Tables 1.4.1 and 1.4.2, AP-42, Volume I, 5th Edition, March 1998 Revision.

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

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 May 27, 2004 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;

- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

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

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

- i. Illinois EPA - Air Compliance Section

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

- ii. Illinois EPA - Air Regional Field Office

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

iii. Illinois EPA - Air Permit Section

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

iv. USEPA Region 5 - Air Branch

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

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or deviations 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 deviations constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6) (c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7) (o) (vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois, 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7) (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
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source.

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. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit compliance certifications annually or more frequently as specified in the applicable requirement or by permit condition.

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

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for deviations with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
 - ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission

limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

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

9.12.2 Reopening and Revision

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

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

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

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

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

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

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

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

Where:

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

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

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

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

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

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

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

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

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

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 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,

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

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

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

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

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

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

10.3 Attachment 3 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.4 Attachment 4 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.
2. Minor Permit Modification
 - Do not violate any applicable requirement;
 - Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



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

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	I.D. number:
	Permit number:
Date received:	

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits?		<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Township name:	7. County:	8. I.D. number:

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents		
24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: d) Board Emission Standards – 35 IAC Chapter I, Subtitle B; e) Federal New Source Performance Standards – 40 CFR Part 60; f) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30.	I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature: I _____ <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <hr style="width: 100%;"/> <p>AUTHORIZED SIGNATURE</p> <hr style="width: 100%;"/> <p>TYPED OR PRINTED NAME OF SIGNATORY</p> </div> <div style="text-align: center;"> <hr style="width: 100%;"/> <p>TITLE OF SIGNATORY</p> <hr style="width: 100%;"/> <p>/ /</p> <p>DATE</p> </div> </div>

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.6 Attachment 6 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

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

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