Proposed CAAPP PERMIT
March 28, 2008

217/782-2113

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Solutia, Inc.
W.G. Krummrich Plant
Attn.: Greta N. Senn, Plant Manager
500 Monsanto Avenue
Sauget, Illinois 62206-1198

I.D. No.: 163121AAC
Application No.: 96010001

Date Received: January 2, 1996
Date Issued: To Be Determined
Expiration Date[1]: To Be Determined

Operation of: Chemical Manufacturing Plant
Source Location: 500 Monsanto Avenue, Sauget, St. Clair County, 62206
Responsible Official: Greta N. Senn, Plant Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a Chemical Manufacturing Plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Dan Punzak at 217/782-2113.

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

ECB:DGP:psj

cc: Illinois EPA, FOS, Region 3
CES
Lotus Notes

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

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1.0 INTRODUCTION

1.1 Source Identification

Solutia, Inc.
W.G. Krummrich Plant
500 Monsanto Avenue
Sauget, Illinois 62206-1198
618/482-8538

I.D. No.: 163121AAC
Standard Industrial Classification: 2869, Industrial Organic Chemicals, Not Elsewhere Classified
2819, Industrial Inorganic Chemicals, Not Elsewhere Classified

1.2 Owner/Parent Company

1.2.1 ACL® Process

Occidental Chemical Corporation
5005 LBJ Freeway
Dallas, Texas 75244

1.2.2 Santoflex and Santoflex Flaking Processes

Solutia Inc.
575 Maryville Centre Drive
St. Louis, Missouri 63141

1.2.3 Phosphorus Pentasulfide Process

Solutia Inc.
575 Maryville Centre Drive
St. Louis, Missouri 63141

1.3 Operator

Solutia, Inc.
W.G. Krummrich Plant
500 Monsanto Avenue
Sauget, Illinois 62206-1198

Lisa Caraway
618/482-6545

1.4 Source Description

Solutia, Inc. is located at 500 Monsanto Avenue in Sauget. The Krummrich plant produces various types of chemical intermediates and final products.

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

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include PSD and MSSCAM, and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

a. This permit contains Title I conditions that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as “T1.”

b. This permit contains Title I conditions that revise Title I requirements established in permits previously issued for this source, which conditions are specifically designated as “T1R.”

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
FIRE	Factor Information Retrieval System, Version 5.0, Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants (EPA-454/R-95-012), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MSSCAM	Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
P2S5	Phosphorus pentasulfide
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
$PM_{2.5}$	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)
RMP	Risk Management Plan
SO_2	Sulfur Dioxide
T1	Title I – identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New – identifies Title I conditions that are being established in this permit

T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

Emission Unit	Description
General Emission Units	
245 CT 0016	P2S5 Process Water Cooling Tower
277 CT 0805	Santoflex Process Water Cooling Tower
252 CT 0812, 0191	ACL Process Water Cooling Towers
Santoflex Process	
2770116, 2770501, 2770551, 2770557, 2770559, 2770565, 2400203	>39,000 Gallon Storage Tanks
2400217, 2400221	<19,800 Gallon Storage Tanks
2770558, 2770563, 2770587, 2770588, 2400209, 2400213, 2770167	<39,000 Gallon Storage Tanks
2770425	Line 1 Process Tank
2770481	Line 2 Process Tank
2770747, 2770749	Process Tanks
2770595	>10,000 Gallon Storage Tanks
2400238, 2400122, 2400125	Packaging Stations
2400101	Pastillator
2400134	Dust Collector
Tank 655-1, 655-2, 655-3, 655-4	<19,800 Gallon Storage Tanks
Tank 21-3505	>39,000 Gallon Storage Tank
P2S5 Process	
2450573	Lid Vacuum Cleaner and Scrubber
2450115	Tote Bin Washing Station
2450105	>39,000 Gallon Storage Tank
2450109	<10,000 Gallon Storage Tank
2450406, 2450438	Conveyors
2450405, 2450442, 2450201, 2450214	Elevators
2450203, 2450207	Hoppers
2450570, 2450216, 2450217	Packaging Stations
2450459	Loading Operation
2450199	Mill
2450112	Packaging Scrubber
2450581, 2450211	Blowers

Emission Unit	Description
ACL Process	
2520160, 2520175	Reactors
2520165, 2520180	Process Tanks
2520169, 2520177	Heat Exchangers
2520170	Column
2520171, 2520178	Condensers
2520185	<39,000 Gallon Storage Tank
2520190	Loading Operation
2520166	Flash Gas Scrubber
2520152	Vent Scrubber

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:

Emission Unit	Description
General Emission Units	
	Lubricating Oil Dispensing
Santoflex Process	
2400152	Packaging Station
2400136, 2400230, 2770270	<10,000 Gallon Storage Tanks
2400110, 2770243, 2770293, 2770701, 2770703, 2770813, 2770833, 2770861	Process Tanks
P2S5 Process	
2450101	<19,800 Gallon Storage Tanks
2450309	Reactor
2450310	Column
2450312	Condenser
2450317, 2450319, 2450320, 2450311	Process Tanks
2450564, 2450565, 2450567, 2450133, 2450214, 2450452	Elevators
2450568, 2450215, 2450456, 2450218, 2450453	Hoppers
2450465, 2450562, 2450450	Conveyors
2450801	T-66 Therminol Storage Tank
2450805	Heat Exchanger
2450205	Mill
ACL Process	
2520210, 2520235	<19,800 Gallon Storage Tanks
2520225, 2520132, 2520204, 2520150	<39,900 Gallon Storage Tanks
2520213, 2520224, 2520212	Reactors
2520268	Heat Exchanger
2520215	Filter
2520216	Separator
2520217	Vacuum Pump
2520203, 2520206	Bucket Elevators

Emission Unit	Description
ACL Process (Continued)	
2520208	Mill
2520220	Loading Conveyor and Station
2520124, 2520284, 2520290, 2520294, 2520296	Process Tanks
2520600	UOC Laboratory
	Unloading Operation

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:

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

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

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b). Note: These activities are not required to be individually listed.

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC

212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.

3.2.4 For each organic material storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70°F, the Permittee shall comply with the applicable requirements of 35 IAC 219.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.

3.2.5 For each organic material emission unit that is exempt from 35 IAC 219 Subpart TT, the Permittee shall maintain emissions of VOM to the atmosphere less than or equal to 2.3 Mg (2.5 tons) per calendar year. The total emissions from emission units (including insignificant and significant activities) not complying with 35 IAC 219.986 shall not exceed 4.5 Mg (5.0 tons) per calendar year.

3.2.6 For each organic material emission unit that is exempt from 35 IAC 219 Subpart RR, the Permittee shall maintain emissions of VOM to the atmosphere less than or equal to 0.91 Mg (1.0 tons) per calendar year. The total emissions from emission units (including insignificant and significant activities) not complying with 35 IAC 219.966 shall not exceed 4.5 Mg (5.0 tons) per calendar year. See Condition 5.6.3.

3.3 <u>Addition of Insignificant Activities</u>

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
Santoflex Process			
Section 7.1			
2770209	Hopper	Dec. 1986	Dust Collector 2770213
2770231	Line #1 Process Tank	Dec. 1986	Condenser 2770234, Separator 2770236, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770233	Line #1 Process Tank	Dec. 1986	Condenser 2770234, Separator 2770236, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770237	Line #1 Reactor	Dec. 1986	Condenser 2770234, Separator 2770236, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770281	Line #2 Process Tank	Dec. 1986	Condensers 2770279 and 2770284, Separator 2770286, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770283	Line #2 Process Tank	Dec. 1986	Condenser 2770284, Separator 2770286, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770287	Line #2 Reactor	Dec. 1986	Condenser 2770284, Separator 2770286, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770301	Line #1 Process Tank	Dec. 1986	Condenser 2770234, Separator 2770236, , Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]

Emission Unit	Description	Date Constructed	Emission Control Equipment
2770321	Line #1 Process Tank	Dec. 1986	Condenser 2770325, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770351	Line #2 Process Tank	Dec. 1986	Condenser 2770284, Separator 2770286, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770371	Line #2 Process Tank	Dec. 1986	Condenser 2770375, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770373	Line #2 Process Tank	Dec. 1986	Condenser 2770375, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770379	Process Tank	Dec. 1986	Condenser 2770375, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770404	Line #1 Column	Dec. 1986	Condensers 2770428, 2770415, and 2770418, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770406	Line #1 Column	Dec. 1986	Condensers 2770428, 2770415, and 2770418, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770409	Line #1 Process Tank	Dec. 1986	Condenser 2770418, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770411	Line #1 Process Tank	Dec. 1986	Steam Jet Condenser 2770415
2770419	Line #1 Process Tank	Dec. 1986	Condenser 2770420, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]

Emission Unit	Description	Date Constructed	Emission Control Equipment
2770451	Line #2 Column	Dec. 1986	Condensers 2770455, 2770460, and 2770465, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770453	Line #2 Column	Dec. 1986	Condensers 2770455, 2770460, and 2770465, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770459	Line #2 Process Tank	Dec. 1986	Condenser 2770460, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770461	Line #2 Process Tank	Dec. 1986	Condenser 2770460, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770463	Line #2 Process Tank	Dec. 1986	Steam Jet Condenser 2770465
2770469	Line #2 Process Tank	Dec. 1986	Condenser 2770470
2770471	Line #2 Process Tank	Dec. 1986	Condenser 2770472
2770473	Line #2 Process Tank	Dec. 1986	Condenser 2770474, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770601	Separator	Aug. 2000	Condenser 2770605
2770607	Separator Tank	Dec. 1986	Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770110	Decant Tank	????	Adsorber 2770945 and Adsorber 2770946
2770912	Steam Stripper	Mar. 2008	Adsorber 2770945 and Adsorber 2770946
Section 7.2			
2770101	>39,900 Gallon Storage Tank	Apr. 1977	Condenser 2770102
2770151	>39,900 Gallon Storage Tank	Sep. 1977	Condenser 2770152
2770157	<39,900 Gallon Storage Tank	July 1977	Condenser 2770158
P2S5 Process Section 7.3			
2450560	Heat Exchanger	Jan. 1998	Packaging Scrubber 2450112
2450804	Furnace (<10.0 mmBtu/hr)	May 1958	None
2450801	<10,000 Gallon Storage Tank	April 1958	None
ACL Process Section 7.4			

Emission Unit	Description	Date Constructed	Emission Control Equipment
2520102	Reactor	June 1983	ACL Gas Scrubber 2520120
2520104	Reactor	June 1983	ACL Gas Scrubber 2520120
2520125	Blower	June 1983	ACL Gas Scrubber 2520120
2520242	Reactor	Nov. 2000	Scrubber 2520256, ACL Gas Scrubber 2520120
2520244	Heat Exchanger	Oct. 1972	Scrubber 2520256, ACL Gas Scrubber 2520120
2520259	Filter	Oct. 1997	Scrubber 2520256, ACL Gas Scrubber 2520120
2520261	Separator	Oct. 1993	Scrubber 2520256, ACL Gas Scrubber 2520120
2520274	Process Tank	Sept. 2000	Scrubber 2520256, ACL Gas Scrubber 2520120
2520278	Process Scrubber	Oct. 1994	Scrubber 2520256, ACL Gas Scrubber 2520120
2520280	Column	Sept. 2000	Scrubber 2520256, ACL Gas Scrubber 2520120
2520281	Process Tank	Oct. 2003	Scrubber 2520256, ACL Gas Scrubber 2520120
2520287	Vacuum Pump	Oct. 1990	Scrubber 2520256, ACL Gas Scrubber 2520120
2520298	Heat Exchanger	May 1985	Scrubber 2520256, ACL Gas Scrubber 2520120
2520313	Bucket Elevator	Oct. 1986	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520319	Compactor	Oct. 1979	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520321	Mill	Oct. 1979	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520322	Screener	Oct. 1992	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520324	Conveyor	Oct. 1987	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520326	Screener	Oct. 1987	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520327	Separator	Oct. 1988	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520329	Hopper	Oct. 1988	Dust Collector 2520524, ACL Gas Scrubber 2520120

Emission Unit	Description	Date Constructed	Emission Control Equipment
2520344	Hopper	Oct. 1988	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520345	Hopper	Dec. 2001	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520506	Dryer	Oct. 1990	Dust Collectors 2520509 and 2520510, ACL Gas Scrubber 2520120
2520507	Process Cyclone	July 1987	Dust Collectors 2520509 and 2520510, ACL Gas Scrubber 2520120
2520521	Gas Burner	Oct. 1992	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520522	Cooler	Oct. 1992	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520523	Process Cyclone	Oct. 1991	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520529	Hopper	Oct. 1988	Dust Collectors 2520509 and 2520510, ACL Gas Scrubber 2520120
2520533	Cooler	Mar. 1993	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520543	Gas Burner	Oct. 1984	Dust Collectors 2520509 and 2520510, ACL Gas Scrubber 2520120
2520809	Chlorine Unloading Dock	Oct. 1988	Scrubber 2520256, ACL Gas Scrubber 2520120
2520810	Chlorine Unloading Dock	Oct. 1988	Scrubber 2520256, ACL Gas Scrubber 2520120
2520813	Process Tank	Oct. 1997	Scrubber 2520256, ACL Gas Scrubber 2520120
Other	**Section 7.5**		
Fugitive PM Emissions	Paved/Unpaved Traffic Areas, Parking Lots, and Roadways	--	None
Fugitive HAP, SO_2, PM, and VOM Emissions	Equipment Leaks, Loading/Unloading Operations, and Cleanup Operations	--	None

[a]The thermal oxidizer is the primary control with one of the adsorbers as a backup control.

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

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

5.1.2 For purposes of the CAAPP, Solutia, Inc. W.G. Krummrich Plant is considered a single source with Environmental Management Corp., I.D. No. 163121AAY, located at 2301 Falling Springs Road, Sauget, IL. The four boilers constructed at Environmental Management Corp. in 1999 provide steam to Solutia. Construction of the new boilers was not reviewed as a new major source or major modification pursuant to 35 IAC Part 203 and 40 CFR 52.21 due the shutdown of Solutia's coal-fired boilers. The source has elected to obtain separate CAAPP permits for these locations.

5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated nonattainment for the National Ambient Air Quality Standards for VOM (moderate) and $PM_{2.5}$ and attainment or unclassifiable for all other criteria pollutants (CO, SO_2, NO_x and lead).

5.3 Source-Wide Applicable Provisions and Regulations

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

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

a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

5.3.3 Fugitive Particulate Matter Operating Program

a. 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)]. The Permittee shall comply with the fugitive particulate matter operating program, submitted to the Illinois EPA and incorporated by reference into this permit, and any amendments to the program submitted pursuant to paragraph b below.

b. 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].

c. 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].

5.3.4 Ozone Depleting Substances

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

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

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

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

5.3.5 Risk Management Plan (RMP)

a. This stationary source, as defined in 40 CFR 68.3, is subject to 40 CFR Part 68, the federal regulations for Chemical Accident Prevention. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(1).

b. The owner or operator of a stationary source shall revise and update the RMP submitted pursuant to 40 CFR 68.150, as specified in 40 CFR 68.190.

5.3.6 Future Emission Standards

a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).

b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.3.7 Episode Action Plan

a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144 and is incorporated by reference into this permit.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.

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

5.3.8 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the

construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.4 Source-Wide Non-Applicability of Regulations of Concern

Source-wide non-applicability of regulations of concern are not set for this source. However, there are terms for unit specific non-applicability of regulations of concern set forth in Section 7 of this permit.

5.5 Source-Wide Control Requirements and Work Practices

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

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	74.16
Sulfur Dioxide (SO_2)	3.28
Particulate Matter (PM)	32.69
Nitrogen Oxides (NO_x)	9.23
HAP, not included in VOM or PM	11.00
Total	130.36

5.6.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.6.3 Other Source-Wide Production and Emission Limitations

a. i. The total emissions of VOM from all emission units at this source which are subject to 35 IAC 219, Subpart RR, and do not comply with 35 IAC 219.966 shall not exceed 5.0 tons per calendar year.

ii. These limits ensure that certain chemical manufacturing process emission units located at this source, are not subject to the control requirements of 35 IAC Part 219, Subpart RR, Miscellaneous Organic Chemical Manufacturing Processes. These limits also apply to insignificant activities and other emission sources in all processes which may meet the applicability criteria in 35 IAC 219.960.

5.7 Source-Wide Testing Requirements

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

a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].

b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].

c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.8 Source-Wide Monitoring Requirements

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

5.9 Source-Wide Recordkeeping Requirements

5.9.1 Annual Emission Records

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

5.9.2 Records for Source-Wide Control Requirements and Work Practices

The Permittee shall keep copy of the fugitive particulate matter operating plan, and any amendments to the plan, as required by Condition 5.3. The Permittee shall also keep a record of activities completed according to the plan.

5.9.3 Records for HAP Emissions

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

5.9.4 Records for Other Source-Wide Emission Limitations

The Permittee shall keep a record of the total emissions of VOM from all emission units at this source which are subject to 35 IAC 219, Subpart RR, and do not comply with 35 IAC 219.966. These records shall include insignificant activities and other emission sources in all processes which may meet the applicability criteria in 35 IAC 219.960. See Condition 3.2.6 and 5.6.3.

5.9.5 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.10 <u>Source-Wide Reporting Requirements</u>

5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

5.10.2 Annual Emissions Report

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

5.10.3 Other Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA if total emissions of VOM from all emission units at this source which are subject to 35 IAC 219, Subpart RR, and do not comply with 35 IAC 219.966, exceed 5 tons in any calendar year.

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

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

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

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

a. For the purpose of estimating fugitive PM emissions from the paved roadways at the source, the emission factors and formulas in Sections 13.2.1 of AP-42, Volume I, Fifth Edition, Supplement D, October, 1997 are acceptable.

b. For the purpose of estimating fugitive PM emissions from the unpaved roadways at the source, the emission factors and formulas in Sections 13.2.2 of AP-42, Volume I, Fifth Edition, Supplement E, September, 1998 or later versions are acceptable.

c. For the purpose of estimating fugitive VOM emissions from process system flanges, seals, valves, etc., during both normal and upset modes of operation, the Permittee may use either USEPA approve emission factors and calculation methods (e.g., “Protocol for Equipment Leak Emission

Estimates," EPA-453/R-96-026, June 1993) or source specific emission factors approved by the Illinois EPA.

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

This section is reserved for emissions control programs. As of the date of issuance of this permit, there are no such programs applicable to this source.

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Santoflex Process

7.1.1 Description

The Santoflex department consists of two similar lines referred to as Line 1 and Line 2. Both lines are batch operations involving three main steps: reaction, filtration, and distillation. All of the products manufactured in these lines are rubber antidegradants.

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

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Santoflex Process			
Section 7.1			
2770209	Hopper	Dec. 1986	Dust Collector 2770213
2770231	Line #1 Process Tank	Dec. 1986	Condenser 2770234, Separator 2770236, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770233	Line #1 Process Tank	Dec. 1986	Condenser 2770234, Separator 2770236, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770237	Line #1 Reactor	Dec. 1986	Condenser 2770234, Separator 2770236, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770281	Line #2 Process Tank	Dec. 1986	Condensers 2770279 and 2770284, Separator 2770286, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770283	Line #2 Process Tank	Dec. 1986	Condenser 2770284, Separator 2770286, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]

Emission Unit	Description	Date Constructed	Emission Control Equipment
2770287	Line #2 Reactor	Dec. 1986	Condenser 2770284, Separator 2770286, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770301	Line #1 Process Tank	Dec. 1986	Condenser 2770234, Separator 2770236, , Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770321	Line #1 Process Tank	Dec. 1986	Condenser 2770325, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770351	Line #2 Process Tank	Dec. 1986	Condenser 2770284, Separator 2770286, Thermal Oxidizer 2770934 or Adsorber 2770943 and Adsorber 2770944[a]
2770371	Line #2 Process Tank	Dec. 1986	Condenser 2770375, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770373	Line #2 Process Tank	Dec. 1986	Condenser 2770375, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770379	Process Tank	Dec. 1986	Condenser 2770375, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770404	Line #1 Column	Dec. 1986	Condensers 2770428, 2770415, and 2770418, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770406	Line #1 Column	Dec. 1986	Condensers 2770428, 2770415, and 2770418, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]

Emission Unit	Description	Date Constructed	Emission Control Equipment
2770409	Line #1 Process Tank	Dec. 1986	Condenser 2770418, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770411	Line #1 Process Tank	Dec. 1986	Steam Jet Condenser 2770415
2770419	Line #1 Process Tank	Dec. 1986	Condenser 2770420, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770451	Line #2 Column	Dec. 1986	Condensers 2770455, 2770460, and 2770465, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770453	Line #2 Column	Dec. 1986	Condensers 2770455, 2770460, and 2770465, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770459	Line #2 Process Tank	Dec. 1986	Condenser 2770460, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770461	Line #2 Process Tank	Dec. 1986	Condenser 2770460, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770463	Line #2 Process Tank	Dec. 1986	Steam Jet Condenser 2770465
2770469	Line #2 Process Tank	Dec. 1986	Condenser 2770470
2770471	Line #2 Process Tank	Dec. 1986	Condenser 2770472
2770473	Line #2 Process Tank	Dec. 1986	Condenser 2770474, Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770601	Separator	Aug. 2000	Condenser 2770605
2770607	Separator Tank	Dec. 1986	Thermal Oxidizer 2770934 or Adsorber 277941 and Adsorber 2770942[a]
2770110	Decant Tank	????	Adsorber 2770945 and Adsorber 2770946

Emission Unit	Description	Date Constructed	Emission Control Equipment
2770912	Steam Stripper	Mar. 2008	Adsorber 2770945 and Adsorber 2770946

[a]The thermal oxidizer is the primary control with one of the adsorbers as a backup control.

7.1.3 Applicable Provisions and Regulations

a. The "affected Santoflex process equipment" for the purpose of these unit-specific conditions, is equipment used in a batch chemical process and described in Conditions 7.1.1 and 7.1.2.

b. The affected chemical manufacturing process is subject to 35 IAC 219 Subpart V, Batch Operations and Air Oxidation Processes, because this source has a SIC of 2821, 2833, 2834, 2861, 2865, 2869, or 2879, and each emission unit included in category (i) or (ii) below is considered a de minimis emission unit and not subject to the control requirements of Condition 7.1.5(a):

i. Any single unit operation with uncontrolled total annual mass emissions that exceed 500 lb/yr and with a VOM concentration greater than 500 ppmv. In this individual determination, no applicability analysis shall be performed for any single unit operation with a VOM concentration of less than or equal to 500 ppmv [35 IAC 219.500(d)(1)]; and

ii. Any batch process train containing process vents which, in the aggregate, have uncontrolled total annual mass emissions of 30,000 lb/yr or more of VOM from all products manufactured in the batch process train. Any single unit operation with uncontrolled total annual mass emissions exceeding 500 lb/yr, regardless of VOM concentration, shall be included in the aggregate applicability analysis [35 IAC 219.500(d)(2)].

iii. Emission units not meeting above de minimus rates are subject to the control requirements of Condition 7.1.5(a).

c. The affected chemical manufacturing process is subject to 35 IAC 219 Subpart G, Use of Organic Material, which provides that:

i. The Permittee shall not cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in Condition 7.1.3(c)(ii) (see also 35 IAC 219.302), 35 IAC 219.303, 219.304 and the following

exception: If no odor nuisance exists the limitation of 35 IAC 219 Subpart G shall apply only to photochemically reactive material [35 IAC 219.301].

ii. Pursuant to 35 IAC 219.302, emissions of organic material in excess of those permitted by Condition 7.1.3(c)(i) (see also 35 IAC 219.301) are allowable if such emissions are controlled by a vapor recovery system which adsorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere [35 IAC 219.302(b)].

d. Hopper 2770209 is subject to 35 IAC 212.321(a). The method for calculating allowable pursuant to this rule is described in Attachment 2.

e. The affected chemical manufacturing process is subject to the NESHAP for Miscellaneous Organic Chemical Production and Processes, 40 CFR 63 Subpart FFFF (§63.2430 through 63.2550 plus tables) and the applicable sections of Subpart A (§63.1 through 63.15 as stated in Table 12 of Subpart FFFF). The Illinois EPA is administering the NESHAP in Illinois under a delegation agreement. One of the requirements of Subpart A for units that comply by use of control equipment is to have a Startup, Shutdown and Malfunction Plan as required by 40 CFR 63.6(e)(3) by the final compliance date.

7.1.4 Non-Applicability of Regulations of Concern

a. The affected chemical manufacturing process is not subject to the NSPS for Volatile Organic Compound (VOC) in the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes, 40 CFR 60 Subpart RRR, because these regulations do not apply to any reactor process that is designed and operated as a batch operation [40 CFR 60.700(c)(1)]

b. The affected chemical manufacturing process is not subject to 40 CFR Part 63, Subparts F through H, because the provisions of these regulations do not apply to batch process vents within a chemical manufacturing process unit [40 CFR 63.100(j)(4)]. In addition, the product is not one of the chemicals listed in Table 1 of Subpart F, a list of SOCMI chemicals to which Subpart F through H apply.

c. This permit is issued based on the affected chemical manufacturing process not being subject to 35 IAC 219 Subpart Q, Synthetic Organic Chemical and Polymer Manufacturing Plant, because these regulations do not apply to any reactor that is designed and operated as a batch operation [35 IAC 219.431(b)(2)].

d. This permit is issued based on the affected chemical manufacturing process not being subject to 35 IAC 219 Subpart RR, Miscellaneous Organic Chemical Manufacturing Processes, because the requirements of Subpart RR do not apply to a source's miscellaneous organic chemical manufacturing process emission units which are included within the categories specified in 35 IAC 219 Subpart V [35 IAC 219.960(b)(2)].

e. Table 12 in 40 CFR 63 Subpart FFFF lists some of the requirements of §63 Subpart A that are not applicable.

7.1.5 Control Requirements and Work Practices

a. Control Requirements for Batch Operations that do not qualify for the de minimis exemptions specified in Condition 7.1.3(b).

i. Except as provided for in 35 IAC 219.500(c), every owner or operator of a single unit operation with an average flow rate, as determined in accordance with 35 IAC 219.502(b), below the flow rate value calculated by the applicability equations contained in 35 IAC 219.500(e), shall reduce uncontrolled VOM emissions from such single unit operation by an overall efficiency, on average, of at least 90 percent, or 20 ppmv, per batch cycle [35 IAC 219.501(a)].

ii. Except as provided for in 35 IAC 219.500(c), every owner or operator of a batch process train with an average flow rate, as determined in accordance with 35 IAC 219.502(b), below the flow rate value calculated by the applicability equations contained in 35 IAC 219.500(e), shall reduce uncontrolled VOM emissions from such batch process train by an overall efficiency, on average, of at least 90 percent, or 20 ppmv, per batch cycle [35 IAC 219.501(b)].

b. The Permittee shall follow good operating practices for the condensers and scrubbers associated with the affected chemical manufacturing process, including periodic inspection, routine maintenance and prompt repair of defects.

c. As noted in Condition 7.1.3(d) the Santoflex process is subject to 40 CFR 63 Subpart FFFF. The particular requirements that apply are in 40 CFR 63.2460 for batch process vents since this process is a batch process. The requirements only apply to process units that vent HAPs and are listed in Table 2 of Subpart FFFF with several options.

i. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by 98 percent by weight by venting emissions

from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices (except a flare); or

ii. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by 95 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of recovery devices or a biofilter, except that you may elect to comply with the requirements of Subpart WW of this part for any process tank; or

iii. Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting through a closed-vent system to a flare or by venting through one or more closed-vent systems to any combination of control devices (excluding a flare) that reduce organic HAP to an outlet concentration of 20 ppmv as TOC or total organic HAP. For all other batch process vents within the process, reduce collective organic HAP emissions as specified in Conditions (i) or (ii) above.

d. There are Subpart FFFF requirements for wastewater systems in §63.2485 which then lists the options in Table 7. Table 7 then references wastewater requirements in §63 Subpart G. Note that the actual wastewater treatment system is offsite and the primary requirements would be for Group I drain systems. As part of notification requirements the Permittee must notify the Illinois EPA if there are Group 1 drains.

e. There are Subpart FFFF requirements for heat exchange systems in §63.2490 which then references Table 10. Table 10 then references heat exchange requirements in §63.104 in Subpart F.

7.1.6 Production and Emission Limitations

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

a. Lines 1 and 2 shall not exceed the following batch limits. These limits were established in Permit 00080064 [T1]:

Line	Batch/Month	Batch/Year
1	465	4,196
2	465	3,779

b. VOM emissions from the affected chemical manufacturing process shall not exceed 40 tons/year for the two lines

combined. This limit is based on the maximum hourly emission rates and annual emission inventory.

This limitation was established in Permit 84090063, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

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].

c. VOM emissions from the Funda Filter (Emission Unit 2770601) shall not exceed 0.1 lb/hour and 0.44 ton/year. These limits are based on the negligible emission rates.

The above limitations were established in Permit 00110001, pursuant to 35 IAC Part 203. These limits document that the construction and/or modification addressed in the aforementioned permit is a natural minor increase and does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

d. This Permit is issued based on negligible emissions of PM for the affected bulk bag unloader. For this purpose, emissions shall not exceed nominal emissions rates of 0.1 lb/hour and 0.44 tons/year.

The above limitations were established in Permit 03090026, pursuant to 40 CFR 52.21. These limits document that the increase is a natural minor increase and does not constitute a new major source or major modification pursuant to Title I of the CAA, the PSD rules [T1].

e. Emissions from the thermal oxidizer 2770934 shall not exceed the following limits:

	Emissions	
Pollutant	(Lbs/Hour)	(Tons/Year)
NO_x	7.3	30.0
CO	15.0	66.0
PM	0.43	1.875
SO_2	0.33	1.45

i. These limits are based on the maximum firing rate of the oxidizer (23.7 mmBtu/hour), 8760 hours of operation annually, and raw material content factors as supplied in the permit application and listed

below. The limits incorporate a safety factor in order to account for operational variability.

A. The sulfur content of waste gas sent to the oxidizer shall not exceed 0.165 pounds/hour.

B. The ash, i.e. particulate matter, content of waste gas sent to the oxidizer shall not exceed 0.43 pounds/hour.

ii. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). The hourly limits are for calculating purposes only and records do not have to be kept to verify the hourly limits.

iii. The above limitations contain revisions to previously issued Permit 07030006. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically MSSCAM and/or PSD. These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, it was determined that a calculation error was made in the construction permit. The annual emissions have not been revised but the hourly limit was increased to a rate that equals the annual rate operating continuously. [T1R].

7.1.7 Testing Requirements

a. Upon the Illinois EPA’s request, the owner or operator of a batch operation shall conduct testing to demonstrate compliance with 35 IAC 219.501, in accordance with the applicable test methods and procedures specified in 35 IAC 219.503(d), (e), and (f) [35 IAC 219.503(a)].

b. For the purpose of demonstrating compliance with the control requirements of 35 IAC 219.501, the batch operation shall be run at representative operating conditions and flow rates during any performance test [35 IAC 219.503(e)].

c. The methods specified in 35 IAC 219.503(f) shall be used to demonstrate compliance with the reduction efficiency requirement set forth in 35 IAC 219.501 [35 IAC 219.503(f)]. These include:

Method 1 or 1A, as appropriate, for selection of the sampling sites;

Method 2, 2A, 2C or 2D, as appropriate for determination of gas stream volumetric flow rate measurements;

Method 25A or Method 18, if applicable, to determine the concentration in the control device inlet and outlet.

Further details of these methods are given in §219.503(f).

d. The owner or operator of a batch operation may propose an alternative test method or procedures to demonstrate compliance with the control requirements set forth in 35 IAC 219.501. Such method or procedures shall be approved by the Illinois EPA and USEPA as evidenced by federally enforceable permit conditions [35 IAC 219.503(h)].

e. In the absence of a request by the Illinois EPA to conduct performance testing in accordance with the provisions of this 35 IAC 219.503, a source may demonstrate compliance by the use of engineering estimates or process stoichiometry [35 IAC 219.503(i)].

f. To determine compliance with 40 CFR 63 Subpart FFFF, the Permittee shall perform an initial compliance test in accordance with the requirements of §63.2460(c)(2) and the applicable requirements of Subpart A. This performance must be done under worst case conditions. During this test operating limits for the process and control equipment must be established.

g. The Permittee shall meet the equipment leaks testing requirements of §63.2480 which then lists the options in Table 2. The options are to comply with 40 CFR 63 Subparts TT or UU. As part of the notification requirements the Permittee shall inform the Illinois EPA which of these options it has chosen.

7.1.8 <u>Monitoring Requirements</u>

a. Except as provided by Condition 7.1.8(c), if the owner or operator is using a scrubber to comply with 35 IAC 219.501, the owner or operator shall install, calibrate, maintain, and operate, according to manufacturer's specifications, the following:

i. A temperature monitoring device for scrubbant liquid having an accuracy of ± 1 percent of the temperature

being monitored expressed in degrees Celsius and a specific gravity device for scrubbant liquid, each equipped with a continuous recorder [35 IAC 219.504(c)(1)]; or

ii. A VOM monitoring device used to indicate the concentration of VOM exiting the control device based on a detection principle such as infra-red photoionization, or thermal conductivity, each equipped with a continuous recorder [35 IAC 219.504(c)(2)].

b. Except as provided by Condition 7.1.8(c), every owner or operator using a condenser to comply with 35 IAC 219.501 shall install, calibrate, maintain, and operate, according to manufacturer's specifications, the following:

i. A condenser exit temperature monitoring device equipped with a continuous recorder and having an accuracy of ± 1 percent of the temperature being monitored expressed in degrees Celsius [35 IAC 219.504(d)(1)]; or

ii. A VOM monitoring device used to indicate the concentration of VOM exiting the control device based on a detection principle such as infra-red photoionization, or thermal conductivity, each equipped with a continuous recorder [35 IAC 219.504(d)(2)].

c. The owner or operator of a process vent shall be permitted to monitor by an alternative method or may monitor parameters other than those listed in Condition 7.1.8(a) or (b), if approved by the Illinois EPA and USEPA. Such alternative method or parameters shall be contained in this permit [35 IAC 219.504(g)].

d. The Permittee shall observe the hopper dust collector for visible emissions on a weekly basis employing USEPA Method 22.

e. 40 CFR 63 Subpart FFFF does not have a specific section for monitoring but the rule does state that all of the requirements for monitoring in §63 Subpart A do apply. The actual variables and their ranges that assure compliance will be determined during the initial compliance demonstration.

f. 40 CFR 63 Subpart FFFF includes requirements for equipment leaks and this is complied with by a monitoring program. §63.2480 references Table 6 for the actual requirements which only apply to equipment that is in organic HAP service. If the chemical manufacturing process unit has no continuous process vents the Permittee has the option to

comply with either 40 CFR 63 Subpart TT or UU or 40 CFR 65 Subpart F. If there is a continuous process vent then the Permittee must comply with either 40 CFR 63 Subpart UU or 40 CFR 65 Subpart F. As part of the notification procedures the Permittee must notify the Illinois EPA if there is a continuous vent and which Subpart will be complied with. Some of the components that have to be monitored may be part of the storage tanks in Section 7.2 of this permit.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected Santoflex process equipment to demonstrate compliance with Conditions 5.6.1, 7.1.3, 7.1.5 through 7.1.8, pursuant to Section 39.5(7)(b) of the Act:

a. Every owner or operator of a de minimis single unit operation or batch process train exempt under 35 IAC 219.500(c)(1) or (c)(2), shall keep records of the uncontrolled total annual mass emissions for any de minimis single unit operation or batch process train, as applicable, and documentation verifying these values or measurements. The documentation shall include the engineering calculations, any measurements made in accordance with 35 IAC 219.503, and the potential or permitted number of batch cycles per year, or, in the alternative, total production as represented in the source's operating permit [35 IAC 219.505(a)].

b. Every owner or operator of a single unit operation exempt under 35 IAC 219.500(b)(3) or (d) shall keep the following records:

   i. The uncontrolled total annual mass emissions and documentation verifying these values or measurements. The documentation shall include any engineering calculation, any measurements made in accordance with 35 IAC 219.503, and the potential or permitted number of batch cycles per year, or, in the alternative, total production as represented in the source's operating permit [35 IAC 219.505(b)(1)].

   ii. The average flow rate in scfm and documentation verifying this value [35 IAC 219.505(b)(2)].

c. Every owner or operator of a batch operation subject to the control requirements of Condition 7.1.5(a) (see also 35 IAC 219.501) shall keep records of the following parameters required to be monitored under Section 7.1.8 (see also 35 IAC 219.504).

i. If using any of the following as a control device, the following records:

A. Where a scrubber is used, except as provided by Condition 7.1.9(c)(i)(C), the exit specific gravity (or alternative parameter which is a measure of the degree of absorbing liquid saturation, if approved by the Illinois EPA) and the average exit temperature of the absorbing liquid, measured continuously and averaged over the same time period as the performance test (both measured while the vent stream is routed normally) [35 IAC 219.505(c)(3)(A)]; or

B. Where a condenser is used, the average exit (product side) temperature measured continuously and averaged over the same time period as the performance test while the vent stream is routed normally [35 IAC 219.505(c)(3)(B)]; or

C. As an alternative to Condition 7.1.9(c)(i)(A) or (B), at a minimum, records indicating the concentration level or reading indicated by the VOM monitoring device at the outlet of the scrubber, condenser, or carbon absorber, measured continuously and averaged over the same time period as the performance test (while the vent stream is routed normally) [35 IAC 219.505(c)(3)(E)].

ii. An owner or operator of a batch operation subject to the control requirements of Condition 7.1.5 may maintain alternative records other than those listed in Condition 7.1.9(c)(i). Any alternative recordkeeping shall be approved by the Illinois EPA and USEPA and shall be contained in this permit [35 IAC 219.505(e)].

d. Every owner or operator of a batch operation required to keep records under 35 IAC 219.505 shall maintain such records at the source for a minimum period of five years and shall make all such records available to the Illinois EPA upon request [35 IAC 219.505(h) and Section 39.5(7)(e)(ii) of the Act].

e. Records of operation and emissions, including:

i. Production rate of each product, batches/mo and batches/yr;

ii. The operating schedule of the affected chemical manufacturing process;

iii. Batch emission factors for each product (lb VOM/batch);

iv. Weekly observations for visible emissions from the hopper dust collector and dates of replacement of the dust collector bags, including the date and time of observations and the name of the observer; and

v. The monthly VOM emissions and aggregate annual VOM, HAP, and PM emissions from the affected chemical manufacturing process based on the Santoflex production rate, the control efficiencies of the condensers and scrubbers, and applicable emission factors and formulas with supporting calculations. This information must be sufficient to verify compliance with condition 7.1.6.

f. NESHAP Recordkeeping Requirements

i. The Permittee shall comply with the recordkeeping requirements of 40 CFR 63.2525 (in Subpart FFFF) and the applicable requirements of §63.10 (in Subpart A as stated in Table 12 of Subpart FFFF).

ii. One specific requirement of the above is a record of monitoring information required by Condition 7.1.8(e) and (f). The records for equipments leak testing are described in §63 Subpart TT or UU or 40 CFR 65 Subpart F and it is not known at this time which Subpart the Permittee will comply with. The Permittee must notify the Illinois EPA which is applicable. Any other records required for the wastewater treatment system or heat exchange systems.

iii. The Permittee shall keep a record of any time the Startup, Shutdown and Malfunction is not followed.

g. Testing results as required by the emissions test specified in Condition 7.1.7 and a list of the important variables (e.g. temperature, flow rate, pressure etc.) and their values that demonstrate compliance. These variables may be for the process equipment, the control equipment or both.

h. The Permittee shall keep appropriate records of good operating practices as required by Condition 7.1.5(b) and a justification for defining the practices as “good”.

7.1.10 <u>Reporting Requirements</u>

a. Reporting of Deviations

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

i. Emissions of VOM from the affected Santoflex process or the Funda filter in excess of the limits specified in Conditions 7.1.6(b) or (c) or the number of batches in excess of the limit in Condition 7.1.6(a) within 30 days of such occurrence.

ii. Operation of the affected Santoflex process in excess of the limits specified in Conditions 7.1.3 or 7.1.5 within 30 days of such occurrence.

iii. Discovery that any of the reasons for nonapplicability stated in Condition 7.1.4 are no longer valid, within 30 days of such discovery.

b. The owner or operator of a single unit operation claiming vent stream concentration exemption level, as set forth in Condition 7.1.3(b)(i) (see also 35 IAC 219.500(d)(1)), shall notify the Illinois EPA in writing if the vent stream concentration at any time reaches or exceeds 500 ppmv, within 60 days after such event. Such notification shall include a copy of all records of such event [35 IAC 219.505(d)].

c. The owner or operator of a de minimis single unit operation or batch process train exempt from the control requirements due to 35 IAC 219.500(c) shall notify the Illinois EPA in writing if the uncontrolled total annual mass emissions from such de minimis single unit operation or batch process train exceed the threshold in 35 IAC 219.500(c)(1) or (2), respectively, within 60 days after the event occurs. Such notification shall include a copy of all records of such event [35 IAC 219.505(g)].

d. Upon request by the Illinois EPA, the owner or operator of a batch operation which is exempt from the control requirements of 35 IAC 219.501, shall submit records verifying the exemption within 45 days of the request. These records shall include the following:

i. The uncontrolled total annual mass emissions and documentation verifying these values or measurements. The documentation shall include any engineering calculation, any measurements made in accordance with 35 IAC 219.503 and the total production as represented in this permit.

ii. The average flow rate in scfm and documentation verifying this value.

e. Submit any reports required by 40 CFR 63 Subpart FFFF (§63.2520) and the applicable requirements of Subpart A (§63.10) as stated in Table 12 of Subpart FFFF.

f. Any notifications required by 40 CFR Subpart FFFF (§63.2515) and the applicable requirements of Subpart A (§63.9) as stated in Table 12 of Subpart FFFF. The notification must include the status of various pieces of equipment or functions such as divisions into Group 1 or Group 2 and which components are in organic HAP service.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected Santoflex process equipment.

7.1.12 Compliance Procedures

a. Compliance with Conditions 7.1.3(b) and (c) is addressed by the requirements of Condition 7.1.5(a) and (b), the testing requirements in Condition 7.1.7(a) through (e), the continuous VOM monitoring requirements in Condition 7.1.8(a) through (c), the records required in Condition 7.1.9(a) through (e), and the reports required in Condition 7.1.10(a) through (d).

b. Compliance with Condition 7.1.3(d) is addressed by the monitoring requirements in Condition 7.1.8(d), the records required in Condition 7.1.9(e)(iv), and the reports required in Condition 7.1.10(a)(ii).

c. Compliance with Condition 7.1.3(e) is addressed by the requirements of Condition 7.1.5(c) through (e), the testing requirements in Condition 7.1.7(f) and (g), the monitoring requirements in Condition 7.1.8(e) and (f), the records required in Condition 7.1.9(f) and (g), and the reports required in Condition 7.1.10(e) and (f).

d. Compliance with Condition 7.1.6 is addressed by the records and reports required in Conditions 7.1.9(e) and 7.1.10(a).

e. To determine compliance with Conditions 5.5.1 and 7.1.3(c)(i), VOM emissions from the affected chemical manufacturing process shall be calculated based on the batch emission rate for each product or other site-specific emission factors:

VOM Emissions (lb) = (Production Rate, batches) x (The Appropriate Emission Factor, lb/batch)

where the emission factors are determined according to the procedures in 40 CFR 63, Subpart FFFF, Miscellaneous Organic Chemical Manufacturing.

7.2 Santoflex Process Storage Tanks

7.2.1 Description

These tanks are used for the storage of raw materials, intermediate materials, or products, in the Santoflex manufacturing process. Tanks 2770101 and 2770151 have a storage capacity of greater than or equal to 40,000 gallons and were constructed before July 1984. Tank 2770157 has a storage capacity of less than 40,000 gallons and was constructed before July 1984.

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

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
2770101	Greater than 39,900 Gallon Storage Tank	Apr. 1977	Condenser 2770102[a]
2770151	Greater than 39,900 Gallon Storage Tank	Sep. 1977	Condenser 2770152[a]
2770157	Less than 39,900 Gallon Storage Tank	July 1977	Condenser 2770158[a]

[a] Voluntary controls not required to achieve compliance with any requirement.

7.2.3 Applicable Provisions and Regulations

a. The “affected Santoflex process storage tanks” for the purpose of these unit-specific conditions, are storage tanks used in the Santoflex manufacturing process and described in Conditions 7.2.1 and 7.2.2.

b. The limitations of 35 IAC 219.120 shall apply to all storage containers of volatile organic liquid (VOL) with a maximum true vapor pressure of 0.5 psia or greater in any stationary tank, reservoir, or other container of 151 cubic meters (40,000 gal) capacity or greater [35 IAC 219.119].

c. The Permittee shall not cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 219.302, 219.303, 219.304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 219 Subpart G shall apply only to photochemically reactive material as defined in 35 IAC 211.4690 [35 IAC 219.301].

d. The affected tanks are subject to the NESHAP for Miscellaneous Organic Chemical Production and Processes, 40

CFR 63 Subpart FFFF. The Illinois EPA is administering the NESHAP in Illinois under a delegation agreement.

7.2.4 Non-Applicability of Regulations of Concern

a. The affected tanks are not subject to the NSPS for Storage Vessels for Petroleum Liquids 40 CFR 60 Subpart Ka because the affected tanks are not used to store petroleum liquids.

b. The affected tanks are not subject to the NESHAP for Hazardous Air Pollutants for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, 40 CFR 63 Subpart G, pursuant to 40 CFR 63.100(e), because the affected tanks are not part of a chemical manufacturing process unit that meets the applicability criteria in 40 CFR 63.100(b).

c. The affected tanks are not subject to the requirements of 35 IAC 219.121, Storage Containers of VPL, pursuant to 35 IAC 219.123(a)(6), which exempts stationary storage tanks in which volatile petroleum liquid is not stored.

d. The affected tanks are not subject to the requirements of 35 IAC 219 Subpart RR, Miscellaneous Organic Chemical Manufacturing Processes, pursuant to 35 IAC 219.960(a), because the affected tanks are included within the category specified in 35 IAC 219 Subpart B.

e. Although one or all of the tanks may contain a HAP material at a process subject to 40 CFR 63 Subpart FFFF, the tanks are not subject to the control requirements of §63.2470 because the vapor pressure limit in Condition 7.2.5(a) classifies the tanks as Group 2 storage tanks and Group 2 storage tanks are not subject to the requirements of §63.2470 and Table 4 in Subpart FFFF.

f. Although Condition 7.2.5(b) cites a rule that is applicable if the vapor pressure of the material is above 2.5 psia, Condition 7.2.5(a) limits the vapor pressure of the materials stored to much less than 2.5 psia and thus a submerged loading pipe is not required. Although not required the tanks actually do have submerged loading pipes.

g. Condition 7.2.3(b) states that the requirements of 35 IAC 219.120 shall apply if the vapor pressure of the material stored is above 0.5 psia but then §219.120(a) states that the VOM reduction requirements in that rule only apply if the vapor pressure is 0.75 psia or above and Condition 7.2.5(a) limits the maximum true vapor pressure to less than 0.75 psia. Therefore the control requirements of §219.120 do not apply.

7.2.5 Control Requirements and Work Practices

a. The affected tanks shall only be used for the storage of materials with maximum true vapor pressure of less than 0.75 psia. This limit is established to avoid the control requirements of 35 IAC 219.120 and also classifies the tanks as Group 2 Storage Tanks pursuant to the definition in 40 CFR 63 Subpart FFFF (§63.2550) [See Condition 7.2.4(f)].

b. The Permittee shall not cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 219.108, or unless such tank is a pressure tank as described in 35 IAC 219.121(a) or is fitted with a recovery system as described in 35 IAC 219.121(b)(2). If no odor nuisance exists these limitations 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) [35 IAC 219.122(b) and (c)].

7.2.6 Production and Emission Limitations

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

The capacity of Tank 2770157 shall be limited to 39,000 gallons. This limit was established in Permit 84090063 [T1].

7.2.7 Testing Requirements

Testing requirements are not set for the affected Santoflex process storage tanks. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.2.8 Monitoring Requirements

a. Pursuant to 35 IAC 219.128(b), available data on the storage temperature may be used to determine the maximum true vapor pressure.

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as

reported by the National Weather Service [35 IAC 219.128(b)(1)].

ii. Pursuant to 35 IAC 219.128(b)(2), for other liquids, the vapor pressure:

A. Determined by ASTM Method D2879-83 [35 IAC 219.128(b)(2)(A)];

B. Measured by an appropriate method approved by the Illinois EPA and USEPA [35 IAC 219.128(b)(2)(B)]; or

C. Calculated by an appropriate method approved by the Illinois EPA and USEPA [35 IAC 219.128(b)(2)(C)].

b. Pursuant to 35 IAC 219.128(c), the owner or operator of each vessel of 40,000 gal capacity or greater storing a mixture of indeterminate or variable composition shall be subject to the following:

i. Prior to the initial filling of the vessel, the maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in Condition 7.2.8(a) (see also 35 IAC 219.128(b)) above [35 IAC 219.128(c)(1)].

ii. Pursuant to 35 IAC 219.128(c)(2), for vessels in which the vapor pressure of the anticipated liquid composition is 0.5 psia or greater but less than 0.75 psia, an initial physical test of the vapor pressure is required; a physical test at least once every 6 months thereafter is required as determined by the following methods:

A. ASTM Method D2879-83 [35 IAC 219.128(c)(2)(A)];

B. ASTM Method D323-82 [35 IAC 219.128(c)(2)(B)]; or

C. As measured by an appropriate method approved by the Illinois EPA [35 IAC 219.128(c)(2)(C)].

c. Any of the above tests for vapor pressure may be performed by the supplier of the material.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for affected Santoflex process storage tanks to demonstrate

compliance with Condition 5.6.1, 7.2.3, and 7.2.5 through 7.2.7 pursuant to Section 39.5(7)(b) of the Act:

a. The owner or operator shall maintain all records required by Condition 7.2.9(c) (see also 35 IAC 219.129), except for the records required by Condition 7.2.9(b) (see also 35 IAC 219.129(f)) below, for at least 3 years. The records required by Condition 7.2.9(b) (see also 35 IAC 219.129(f)) below shall be kept for the life of the source [35 IAC 219.129(e)].

b. The owner or operator of each storage vessel specified in Condition 7.2.3(b) (see also 35 IAC 219.119) shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel [35 IAC 219.129(f)].

c. Except as provided in Condition 7.2.8(b) (see also 35 IAC 219.128(c)), the owner or operator of each storage vessel subject to the requirements in 35 IAC 219.120 with a design capacity greater than or equal to 40,000 gallons storing a liquid with a maximum true vapor pressure greater than or equal to 0.5 psia but less than 0.75 psia shall maintain a record of the VOL storage, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period [35 IAC 219.129(g)].

d. Records of operation and emissions, including:

   i. Identification of the material stored in the affected tanks;

   ii. The maximum true vapor pressure of the material stored in the affected tanks, psia;

   iii. The throughput of the affected tanks, gal/mo and gal/yr; and

   iv. The aggregate annual VOM and HAP emissions from the affected tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

e. A calculation of the emission rate in lb/hr when filling a tank at a typical maximum pumping rate if the material is photochemically reactive.

f. Keep any records required by 40 CFR 63 Subpart FFFF (§63.2525) and the applicable sections of Subpart A (§63.10) as delineated in Table 12 of Subpart FFFF. This would include records that the tanks are operated as Group 2 storage tanks [See Condition 7.2.4(e)].

7.2.10 Reporting Requirements

a. Reporting of Deviations

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

i. Emissions of VOM from the affected Santoflex process storage tanks in excess of the limits specified in Condition 7.2.3(c) within 30 days of such occurrence.

ii. Operation of the affected Santoflex process storage tanks in excess of the vapor pressure limits specified in Condition 7.2.5(a) within 30 days of such occurrence [35 IAC 219.128(a)].

b. Submit any reports required by 40 CFR 63 Subpart FFFF (§63.2520 and Table 11) and the applicable sections of Subpart A (§63.10) as delineated in Table 12 of Subpart FFFF.

c. Submit any notifications required by 40 CFR 63 Subpart FFFF (§63.2515 and Table 11) and the applicable sections of Subpart A (§63.10) as delineated in Table 12 of Subpart FFFF.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected Santoflex process storage tanks.

7.2.12 Compliance Procedures

a. Compliance with Condition 7.2.3 (b) is addressed by the requirements of Condition 7.2.5(a), the monitoring requirements in Condition 7.2.8, the records required in Condition 7.2.9, and the reports required in Condition 7.2.10.

b. Compliance with Condition 7.2.3(c) is addressed by the records and reports required in Conditions 7.2.9(e) and 7.2.10(a)(i).

c. Compliance with Condition 7.2.3(d) is addressed by the requirements of Condition 7.2.5(a), the records required in Condition 7.2.9(f) and the reports required in Condition 7.2.10(b) and (c).

d. Compliance with Condition 7.2.6 is addressed by the records required in Conditions 7.2.9(b).

e. For the purpose of calculating VOM emissions from the affected tanks to determine compliance with Conditions 5.6.1 and 7.2.3(c), Versions 3.1 or 4.0 of the TANKS program are acceptable.

7.3 P2S5 Process

7.3.1 Description

Phosphorus pentasulfide (P2S5) is formed into flakes for packaging. Items 2450112 and 2450560 were constructed after April 14, 1972 and are considered to be new process emission units. PM emissions from Emission Unit 2450560 vent to Emission Unit 2450112. The P2S5 Process Furnace is used to heat a material used in the P2S5 manufacturing process.

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

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
2450112	Packaging Scrubber	Jan. 1998	None
2450560	Heat Exchanger	May 1958	None
2450804	Furnace (<10.0 mmBtu/hr)	April 1958	None

7.3.3 Applicable Provisions and Regulations

a. The “affected process units 2450112 and 2450560” for the purpose of these unit-specific conditions, are described in Conditions 7.3.1 and 7.3.2.

b. The “affected fuel combustion unit 2450804” for the purpose of these unit-specific conditions, is described in Conditions 7.3.1 and 7.3.2.

c. The affected units are subject to the opacity limits identified in Condition 5.3.2(b).

d. The affected process units 2450112 and 2450560 are subject to the PM emission limits of 35 IAC 212.321. the method for calculating emissions to determine compliance with this rule are described in Attachment 2.

e. The permittee shall not cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm [35 IAC 214.301].

7.3.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected furnace not being subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the actual heat input of the unit is less than 2.9 MW (10 mmBtu/hr).

b. This permit is issued based on the affected furnace not being subject to 35 IAC 217.141, Emissions of Nitrogen Oxides from Existing Fuel Combustion Emission Sources in Major Metropolitan Areas, because the actual heat input of the unit is less than 73.2 MW (250 mmBtu/hr).

c. Pursuant to 35 IAC 215.303, the affected furnace, i.e., fuel combustion emission unit, is not subject to 35 IAC 215.301, Use of Organic Material.

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

7.3.5 Control Requirements and Work Practices

a. The Permittee shall follow good operating practices for the packaging scrubber including periodic inspection, routine maintenance and prompt repair of defects [T1].

b. The Permittee shall cease operation of an emission unit in the Phosphorous Pentasulfide Process in the event of a malfunction or breakdown that would result in emissions of air contaminants in excess of applicable emission standards or the limitations in Condition 7.3.6 [T1].

c. The firing rate of the affected fuel combustion unit shall not exceed 6 mmBtu/hr and shall use only natural gas as the fuel [T1].

d. The replacement units covered by Construction Permit 05070023 [i.e. the reactor, column and condenser] that are consumed by the P2S5 process and require regular replacement are considered to be under continuous construction and covered by Construction Permit 05070023 as long as all information submitted in the permit application remains true and correct.

Regular replacement for purposes of the above-referenced construction permit shall be defined as actual replacement of the consumed unit at a minimum of every 48 months.

7.3.6 Production and Emission Limitations

a. Production of the P2S5 Process shall not exceed 15 million pounds per month and 120 million pounds per year. These limits were established in Permit 02030055 [T1].

b. Emissions shall not exceed the following limits:

Emission Unit	PM Emissions (Lbs/Hr)	PM Emissions (Tons/Yr)	SO_2 Emissions (Lbs/Hr)	SO_2 Emissions (Tons/Yr)
2450112	0.60	2.60	---	---
2450560	0.55	2.42	10.0*	8.8

* SO_2 emissions on a daily basis shall not exceed 2.0 lb/hr, block average.

The above limitations contain revisions to previously issued Permit 02030055. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically MSSCAM and/or PSD. These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the PM limit from unit 2450112 is the combination of emissions from several small units vented to the scrubber. In addition, this limit documents that the construction and/or modification addressed in the aforementioned permit was a natural minor increase and does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1R].

c. Compliance with annual limits above 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].

d. Emissions from the furnace shall not exceed the following limits:

PM Emissions (Lb/Hour)	PM Emissions (Ton/Year)	SO_2 Emissions (Lb/Hour)	SO_2 Emissions (Ton/Year)
0.1	0.44	0.004	0.01

The above limitations were established in Permit 02030055, pursuant to 35 IAC Part 203 and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). This limit documents that the construction and/or modification addressed in the aforementioned permit was a natural minor increase and does not constitute a new major source or major modification

pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].

e. This permit is issued based on incidental emissions of CO, VOM, and NO_x from the P2S5 Process. For this purpose, total emissions of each pollutant shall not exceed 1.0 lb/hr and 4.4 tons/yr. These limitations were established in Permit 02030055.

f. Compliance with annual limits in (d) and (e) above 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].

7.3.7 Testing Requirements

Pursuant to 35 IAC 212.110 and Section 39.5(7)(b) of the Act, testing for PM emissions shall be performed as follows:

a. In accordance with subsection (c) below, measurement of particulate matter emissions from stationary emission units subject to 35 IAC Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E [35 IAC 212.110(a)].

b. In accordance with subsection (c) below, the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4 [35 IAC 212.110(b)].

c. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person’s own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].

7.3.8 Monitoring Requirements

The Permittee shall observe the visible emissions of the three affected units above on a weekly basis employing USEPA Method 22.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected process and fuel combustion units to demonstrate compliance with Condition 5.6.1, 7.3.3, 7.3.5 and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

a. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall include the following:

   i. The date, place and time of sampling or measurements;

   ii. The date(s) analyses were performed;

   iii. The company or entity that performed the analyses;

   iv. The analytical techniques or methods used;

   v. The results of such analyses; and

   vi. The operating conditions as existing at the time of sampling or measurement.

b. Records addressing use of good operating practices for the packaging scrubber:

   i. Records for periodic inspection of the packaging scrubber with date, individual performing the inspection, and nature of inspection; and

   ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

c. Records of operation and emissions, including:

   i. Phosphorus pentasulfide production (lb/month and lb/year);

   ii. The operating schedule of the affected process units, including startup and shutdown times;

   iii. Scrubbant flow rates, either recorded manually once per shift or by a continuous data system. For this purpose, scrubbant flow may be measured directly, e.g., gallons per minute, or indirectly, e.g., electricity drawn by the scrubbant pumps;

   iv. Visible emission readings, including the date and time of observations and the name of the observer;

   v. A log of releases through rupture disks that includes the date, time and estimate of emissions from the release; and

   vi. The monthly and aggregate annual PM and SO2 emissions from the affected process units based on the

operating schedule and the applicable emission factors and formulas with supporting calculations.

d. Total natural gas usage for the affected furnace (ft^3/month and ft^3/year); and

e. Annual aggregate NO_x, PM, SO_2, CO, and VOM emissions from the affected furnace, based on fuel consumption and the applicable emission factors listed in Condition 7.3.12(d).

7.3.10 Reporting Requirements

a. Reporting of Deviations

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

i. Emissions of PM, NO_x, SO_2, VOM and CO from the affected process and fuel combustion units in excess of the limits specified in Condition 7.3.6 within 30 days of such occurrence.

ii. Operation of the affected process units in excess of the limits specified in Conditions 7.3.3(c) through (e) within 30 days of such occurrence.

iii. Discovery that any of the reasons for nonapplicability stated in Condition 7.1.4 are no longer valid, within 30 days of such discovery.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected process and fuel combustion units.

7.3.12 Compliance Procedures

a. Compliance with Conditions 7.3.3(c) and (d) is addressed by the requirements of Condition 7.3.5(a), the testing requirements in Condition 7.3.7, the monitoring requirements in Condition 7.3.8,), the records required in Condition 7.3.9, and the reports required in Condition 7.3.10.

b. Compliance with Condition 7.3.3(e) is addressed by the negligible emissions of SO_2 as reported in recent annual emission reports of less than 1 ton/year.

c. Compliance with Condition 7.3.6 is addressed by the records and reports required in Conditions 7.3.9 and 7.3.10.

d. Emissions from the furnace fuel combustion shall be calculated using the following formula:

i. A. Emission factors for the affected furnace when fired by natural gas:

Pollutant	Emission Factors (lb/mmscf)
VOM	5.5
PM	7.6
SO_2	0.6
NO_x	100
CO	84

The emission factors (lb/mmscf) are for Natural Gas-Fired Small Boilers (<100 mmBtu/hr Heat Input) from AP-42 Section 1.4 (dated 3/98).

B. Emission formula for the affected boiler when fired by natural gas:

(Boiler Emissions, lb) = (The Appropriate Emission Factor, lb/mmscf) x (Natural Gas Usage, mmscf)

7.4 ACL Process

7.4.1 Description

In the ACL process, trichloro-s-triazenetrione (ACL-90) and sodium cyanurate are produced in a continuous process which consists of seven main steps: purification; feed preparation; scrubbing, chlorination and recovery operations; filtering, drying, and cooling; compaction; packaging; and waste treatment. The major raw materials used in the process are cyanuric acid, sulfuric acid, sodium hydroxide, chlorine, and sodium thiosulfate. The final product is shipped primarily to repackers who tablet and/or reformulate and tablet the product for use in water treatment (e.g., sanitizer for pool water).

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

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
2520102	Reactor	June 1983	ACL Gas Scrubber 2520120
2520104	Reactor	June 1983	ACL Gas Scrubber 2520120
2520125	Blower	June 1983	ACL Gas Scrubber 2520120
2520242	Reactor	Nov. 2000	Scrubber 2520256, ACL Gas Scrubber 2520120
2520244	Heat Exchanger	Oct. 1972	Scrubber 2520256, ACL Gas Scrubber 2520120
2520259	Filter	Oct. 1997	Scrubber 2520256, ACL Gas Scrubber 2520120
2520261	Separator	Oct. 1993	Scrubber 2520256, ACL Gas Scrubber 2520120
2520274	Process Tank	Sept. 2000	Scrubber 2520256, ACL Gas Scrubber 2520120
2520278	Process Scrubber	Oct. 1994	Scrubber 2520256, ACL Gas Scrubber 2520120
2520280	Column	Sept. 2000	Scrubber 2520256, ACL Gas Scrubber 2520120
2520281	Process Tank	Oct. 2003	Scrubber 2520256, ACL Gas Scrubber 2520120

Emission Unit	Description	Date Constructed	Emission Control Equipment
2520287	Vacuum Pump	Oct. 1990	Scrubber 2520256, ACL Gas Scrubber 2520120
2520298	Heat Exchanger	May 1985	Scrubber 2520256, ACL Gas Scrubber 2520120
2520313	Bucket Elevator	Oct. 1986	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520319	Compactor	Oct. 1979	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520321	Mill	Oct. 1979	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520322	Screener	Oct. 1992	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520324	Conveyor	Oct. 1987	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520326	Screener	Oct. 1987	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520327	Separator	Oct. 1988	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520329	Hopper	Oct. 1988	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520344	Hopper	Oct. 1988	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520345	Hopper	Dec. 2001	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520506	Dryer	Oct. 1990	Dust Collectors 2520509 and 2520510, ACL Gas Scrubber 2520120
2520507	Process Cyclone	July 1987	Dust Collectors 2520509 and 2520510, ACL Gas Scrubber 2520120
2520521	Gas Burner	Oct. 1992	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520522	Cooler	Oct. 1992	Dust Collector 2520524, ACL Gas Scrubber 2520120

Emission Unit	Description	Date Constructed	Emission Control Equipment
2520523	Process Cyclone	Oct. 1991	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520529	Hopper	Oct. 1988	Dust Collectors 2520509 and 2520510, ACL Gas Scrubber 2520120
2520533	Cooler	Mar. 1993	Dust Collector 2520524, ACL Gas Scrubber 2520120
2520543	Gas Burner	Oct. 1984	Dust Collectors 2520509 and 2520510, ACL Gas Scrubber 2520120
2520809	Chlorine Unloading Dock	Oct. 1988	Scrubber 2520256, ACL Gas Scrubber 2520120
2520810	Chlorine Unloading Dock	Oct. 1988	Scrubber 2520256, ACL Gas Scrubber 2520120
2520813	Process Tank	Oct. 1997	Scrubber 2520256, ACL Gas Scrubber 2520120

7.4.3 Applicable Provisions and Regulations

a. The “affected ACL manufacturing process” for the purpose of these unit-specific conditions, is a process that occurs in any of the vessels described in Conditions 7.4.1 and 7.4.2.

b. The affected ACL manufacturing processes are subject to the emission limits identified in Condition 5.3.2.

c. The affected ACL manufacturing processes that emit PM are subject to 35 IAC 212 Subpart L. The method to calculate emissions pursuant to this rule are described in Attachment 2.

d. The affected chemical manufacturing process is subject to the NESHAP for Miscellaneous Organic Chemical Production and Processes, 40 CFR 63 Subpart FFFF (§63.2430 through 63.2550 plus tables) and the applicable sections in Subpart A (§63.1 through 63.15) as stated in Table 12 in Subpart FFFF. The Illinois EPA is administering the NESHAP in Illinois under a delegation agreement. One of the requirements of Subpart A for units that comply by use of control equipment is to have a Startup, Shutdown and Malfunction Plan for units that emit HAPs as required by 40 CFR 63.6(e)(3) by the final compliance date. The organic materials involved in this process (a raw material and the product) are not HAPs and are emitted as PM and not volatile organic

materials. See Condition 7.4.5 for limits that apply to the halogen HAPs emitted from this process.

e. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected ACL manufacturing process in violation of the applicable standards in Condition 7.4.3(c) in the event of a malfunction or breakdown of the ACL Gas Scrubber (2520120). This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent risk of injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

i. This authorization only allows such continued operation as necessary to provide essential service or prevent risk of injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practical minimize material throughput of the ACL manufacturing process, repair the ACL Gas Scrubber (2520120), remove the affected ACL manufacturing process from service or undertake other action so that excess emissions cease.

iii. The Permittee shall fulfill the applicable recordkeeping and reporting requirements of Conditions 7.4.9(d) and 7.4.10(c). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected ACL manufacturing process out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.4.4 Non-Applicability of Regulations of Concern

a. The fuel burning portion of the affected ACL manufacturing process is not subject to 35 IAC Part 217, Subparts B and C, Nitrogen Oxide Emissions from New and Existing Fuel Combustion Emission Sources, because the firing rate of each burner is less than 73.2 MW (250 mmBtu/hr).

b. The fuel burning portions of the affected ACL manufacturing process is not subject to 35 IAC Part 216, Subpart B, Carbon Monoxide Emissions from Fuel Combustion Emission Units, because the firing rate of each burner is less than 2.9 MW (10 mmBtu/hr).

c. The affected ACL manufacturing processes are not subject to 35 IAC 215.301, because the primary raw material and the product are emitted in the form of PM and not volatile organic materials.

d. Neither the continuous process vent requirements of 40 CFR 63.2455 or the batch process vent requirements of 40 CFR 63.2460 (both in 40 CFR 63 Subpart FFFF) are applicable because those requirements apply to HAP organic material emissions and the organic materials in this process are neither HAPs or volatile organics as they are emitted as PM. The following provisions also do not apply for the same reason: storage tanks [§63.2470]; transfer racks [§63.2475]; equipment leaks [§63.2480]; wastewater streams [§63.2485]; and heat exchange systems [§63.2490]. See Condition 7.4.5 for applicability of rules to halogen HAP emissions.

e. Condition 7.4.5(d) below specifies that the control device for the HCl and Cl_2 emission must meet the requirements of §63.994 but then §63.2465(c)(3)states that §63.994(b)(2) does not apply. Note that the rule references HCl emissions but this process does not emit HCl.

f. Although Condition 7.4.5(d) states that §63.2465 does apply, §63.2465(d) does not apply because the PM emissions

from this process are not a HAP material nor is it a new source.

g. Table 12 in 40 CFR 63 Subpart FFFF lists some of the requirements of §63 Subpart A that are not applicable.

7.4.5 Control Requirements and Work Practices

a. The Permittee shall follow good operating practices for the scrubbers, dust collectors, and cyclone including periodic inspection, routine maintenance and prompt repair of defects. The Permittee shall maintain all the scrubbers, bag filters, and the cyclones in good working condition.

b. Except for the ACL Gas Scrubber (2520120), in the event of malfunction or breakdown of the scrubbers or the bag filters, the Permittee shall not operate the equipment ducted to the malfunctioning or broken control equipment.

c. In the event that the Ammonia Stripping and/or Recovery Area results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including, but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

d. For compliance with 40 CFR 63 Subpart FFFF, the Permittee must comply with §63.2465 for hydrogen chloride (HCl) and chlorine (Cl_2) emissions. This rule references Table 3 of Subpart FFFF which lists the requirement as reducing HCl and Cl_2 emissions by 99 percent by weight or to an outlet concentration of less than 20 ppmv by venting through a closed-vent system to any combination of control devices. The control devices (the ACL Gas Scrubber and Scrubber 2520256) must also meet the requirements for halogen scrubbers in §63.994 (Subpart SS) and the applicable control device requirements in §63.11 (in Subpart A as delineated in Table 12 of Subpart FFFF). Note that the rule references HCl emissions but this process does not emit HCl.

7.4.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected ACL manufacturing processes are subject to the following:

a. The firing rate of the Gas Burner (Emission Unit 2520521) shall not exceed 2.0 mmBtu/hr. This limitation was established in Permit 92050073.

b. NO_x emissions from the Gas Burners (Emission Units 2520521 and 2520543) shall not exceed 3.28 tons/year. These limitations were established in Permit 97080078, pursuant

to 35 IAC Part 203 and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). 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 and the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. Emissions of PM from the affected ACL manufacturing process shall not exceed 5.92 tons/year. This limitation was established in Permit 97080078, pursuant to 35 IAC Part 203 and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). 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 and the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

d. Emissions from the affected ACL manufacturing process shall not exceed the following limits:

Chlorine Emissions		Ammonia Emissions	
(Ton/Mo)	(Ton/Yr)	(Ton/Mo)	(Ton/Yr)
0.57	5.72	1.70	16.60

The above limitations were established in Permit 00070068. These limitations include emissions from limited operation of the affected ACL manufacturing process during malfunction or breakdown of Gas Scrubber 2520120, as allowed by Condition 7.33.3(g).

e. 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].

7.4.7 Testing Requirements

a. Pursuant to 35 IAC 212.110 and Section 39.5(7)(b) of the Act, testing for PM emissions shall be performed as follows:

i. Measurement of particulate matter emissions from stationary emission units subject to 35 IAC Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E [35 IAC 212.110(a)].

ii. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60,

Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4 [35 IAC 212.110(b)].

iii. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].

b. When the performance test for the halogen scrubber is conducted, the test must meet the requirements of §63.994(b)(1). This rule in turn specifies that the procedures in §63.997 must be followed. The performance test requirements of §63 Subpart A also apply as delieneated in Table 12 of Subpart FFFF.

7.4.8 Monitoring and Inspection Requirements

a. For compliance with 40 CFR 63 Subpart FFFF, Scrubber 2520256 and ACL Gas Scrubber 2520120 shall comply with the monitoring requirements of §63.994(c) and §63.996 in Subpart SS, and the applicable monitoring requirements in §63.8 (in Subpart A as delineated in Table 12 of Subpart FFFF). These include a pH monitoring device for the scrubber effluent and flow meters for liquid scrubber influent and gas stream flow.

b. Note that since each of the dust collectors is followed by the ACL Gas Scrubber, which functions as a PM control device in addition to controlling the Cl_2 emissions, the monitoring listed in (a) above is sufficient for PM monitoring.

c. The vent of each of the scrubbers shall be checked for visible emissions once per week employing USEPA Method 22.

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected ACL manufacturing process to demonstrate compliance with Condition 5.6.1, 7.4.3, 7.4.5 through 7.4.8, pursuant to Section 39.5(7)(b) of the Act:

a. Records addressing use of good operating practices for the scrubbers and dust collectors:

i. Records for periodic inspection of the scrubbers and dust collectors, with date, individual performing the inspection, and nature of inspection; and

ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

b. Records of operation and emissions, including:

i. ACL production rate, tons/mo and tons/yr;

ii. The firing rate (mmBtu/hr) and natural gas usage (ft^3/mo and ft^3/yr) for the gas burners;

iii. The operating schedule of the affected ACL manufacturing process;

iv. Weekly visible emissions observations of the scrubber discharges, including the date and time of observations and the name of the observer; and

v. The monthly and chlorine and ammonia emissions and aggregate annual PM, NO_x, CO, SO_2, VOM, HAP, chlorine and ammonia emissions from the affected ACL manufacturing process based on the material processed, the receivers throughputs, and the applicable emission factors and formulas with supporting calculations.

c. NESHAP Recordkeeping Requirements

i. The Permittee shall comply with the recordkeeping requirements of 40 CFR 63.2525 (in Subpart FFFF), the applicable requirements of §63.10 (in Subpart A as stated in Table 12 of Subpart FFFF) and the applicable requirements of §63.998 (in Subpart SS) for the halogen control device.

ii. Among these records is a record of any time the Startup, Shutdown and Malfunction Plan is not followed.

d. Records for Malfunctions and Breakdowns

The Permittee shall maintain records, pursuant to 35 IAC 201.263, of continued operation of an affected ACL manufacturing process subject to Condition 7.4.3(e) during malfunctions and breakdown, which as a minimum, shall include:

i. Date and duration of malfunction or breakdown.

ii. A detailed explanation of the malfunction or breakdown.

iii. An explanation why the affected ACL manufacturing process continued to operate in accordance with Condition 7.4.3(e).

iv. The measures used to reduce the quantity of emissions and the duration of the event.

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

vi. The amount of release above typical emissions during malfunction/breakdown.

7.4.10 Reporting Requirements

a. Reporting of Deviations

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

i. Emissions of PM or visible emissions from the affected ACL manufacturing process in excess of the limits specified in Condition 7.4.3(b) and (c) within 30 days of such occurrence.

ii. Emissions of NO_x, PM, chlorine or ammonia in excess of the limits specified in Condition 7.4.6 within 30 days of such occurrence.

b. NESHAP Reporting Requirements

The Permittee shall comply with the reporting requirements of 40 CFR 63.2520 (in Subpart FFFF), the applicable requirements of §63.10 (in Subpart A as stated in Table 12 of Subpart FFFF) and the applicable requirements of §63.999 (in Subpart SS) for the halogen control device. The Notification of Compliance Status shall include the operating range for each monitoring parameter specified to comply with Part 63.

c. Reporting of Malfunctions and Breakdowns

The Permittee shall provide the following notification and reports to the Illinois EPA, Air Compliance Unit and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of an affected ACL

manufacturing process subject to Condition 7.4.3(e) during malfunction or breakdown:

i. A. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown.

B. Upon achievement of compliance, the Permittee shall give a written follow-up notice within 15 days to the Illinois EPA, Air Compliance Unit and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the affected ACL manufacturing process was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected ACL manufacturing process was taken out of service.

C. If compliance is not achieved within 5 working days of the occurrence, the Permittee shall submit interim status reports to the Illinois EPA, Air Compliance Unit and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the expected date on which repairs will be complete or the affected ACL manufacturing process will be taken out of service.

ii. In accordance with the due dates in Condition 8.6.1, the Permittee shall submit semi-annual malfunction and breakdown reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act. These reports may be submitted along with other semi-annual reports and shall include the following information for malfunctions and breakdowns of the affected ACL manufacturing process during the reporting period:

A. A listing of malfunctions and breakdowns, in chronological order, that includes:

I. The date, time, and duration of each incident.

II. The identity of the affected operation(s) involved in the incident.

B. Dates of the notices and reports of Conditions 7.4.10(c)(i).

C. Any supplement information the Permittee wishes to provide to the notices and reports of Conditions 7.4.10(c)(i).

D. The aggregate duration of all incidents during the quarter.

E. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

iii. Note that the above reporting for malfunction and breakdown addresses 35 IAC rules and NESHAP reporting for startup, shutdown and malfunction is addressed in §63.10(d)(5). See Condition 7.4.10(c) above.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected ACL manufacturing process without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

The affected ACL manufacturing process may be used to manufacture either ACL or sodium cyanurate, as long as such operation complies with the conditions of this permit.

7.4.12 Compliance Procedures

a. Compliance with Condition 7.4.3(b) and (c) is addressed by the requirements of Condition 7.4.5(a), the testing requirements in Condition 7.4.7, the monitoring requirements in Condition 7.4.8, the records required in Condition 7.4.9, and the reports required in Condition 7.4.10.

b. Compliance with Condition 7.4.3(d) is addressed by the requirements of Condition 7.4.5(d), the testing requirements in Condition 7.4.7(b), the monitoring requirements in Condition 7.4.8(a), the records required in Condition 7.4.9(c), and the reports required in Condition 7.4.10(b).

c. Compliance with Condition 7.4.3(e) is addressed by the records and reports required in Conditions 7.4.9(d) and 7.4.10(c).

d. Compliance with Condition 7.4.6 is addressed by the records and reports required in Conditions 7.4.9 and 7.4.10(a)(ii).

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 _____Error! Bookmark not defined. (the date of issuance of the proposed permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test

methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

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

every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

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

8.6.2 Test Notifications

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

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;

e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

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

8.6.3 Test Reports

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

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

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.

b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

i. Illinois EPA - Air Compliance Unit

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

ii. Illinois EPA - Air Quality Planning Section

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

iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

iv. USEPA Region 5 - Air Branch

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

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

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

8.7 Title I Conditions

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment),

practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or

ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any regulated activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Unit, Air Regional Field Office, and USEPA Region 5 – Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the

certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence [Section 39.5(7)(k) of the Act]:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

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

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed

description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

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

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

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

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit.

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program.

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

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

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

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

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

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

9.15 General Authority for the Terms and Conditions of this Permit

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

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

10.0 ATTACHMENTS

Attachment 1 Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

Attachment 2 Emissions of Particulate Matter from Process Emission Units

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

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

ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

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

where:

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

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

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

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

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

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

Metric P Mg/hr	E kg/hr	English P T/hr	E 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

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

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

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

ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

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

where:

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

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

	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

B. 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

iii. 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

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

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

There are no specific emission units that require a CAM plan as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

Attachment 4 Guidance

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

Guidance On Revising A CAAPP Permit:

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

Guidance On Renewing A CAAPP Permit:

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

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

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

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

www.epa.state.il.us/air/caapp/199-caapp.pdf
www.epa.state.il.us/air/permits/197-fee.pdf

DGP:psj