217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

IMTT-Lemont
Attn: Jerome Nickleski, Environmental Manager
13589 Main Street, P.O. Box 727,
Lemont, Illinois 60439

Application No.: 95120130 I.D. No.: 031806AAG
Applicant's Designation: Date Received: December 7, 1995
Operation of: Volume Bulk Storage and Transfer Terminal
Date Issued: May 4, 2000 Expiration Date[2]: May 4, 2005
Source Location: 13589 Main Street, Lemont, Cook
Responsible Official: Michael Marrino, Terminal Manager

This permit is hereby granted to the above-designated Permittee to operate a volume bulk storage and transfer terminal, 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 Michael J. Knobloch at 217/782-2113.

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

DES:MJK:psj

cc: Illinois EPA, FOS, Region 1
USEPA

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

2 Except as provided in Condition 8.7 of this permit.

TABLE OF CONTENTS

		PAGE
1.0	SOURCE IDENTIFICATION	4
	1.1 Source	
	1.2 Owner/Parent Company	
	1.3 Operator	
	1.4 General Source Description	
2.0	LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	5
3.0	INSIGNIFICANT ACTIVITIES	7
	3.1 Identification of Insignificant Activities	
	3.2 Compliance with Applicable Requirements	
	3.3 Addition of Insignificant Activities	
4.0	SIGNIFICANT EMISSION UNITS AT THIS SOURCE	10
5.0	OVERALL SOURCE CONDITIONS	13
	5.1 Source Description	
	5.2 Applicable Regulations	
	5.3 Non-Applicability of Regulations of Concern	
	5.4 Source-Wide Operational and Production Limits and Work Practices	
	5.5 Source-Wide Emission Limitations	
	5.6 General Recordkeeping Requirements	
	5.7 General Reporting Requirements	
	5.8 General Operational Flexibility/Anticipated Operating Scenarios	
	5.9 General Compliance Procedures	
6.0	EMISSION REDUCTION MARKET SYSTEM (ERMS)	20
	6.1 Description of ERMS	
	6.2 Applicability	
	6.3 Obligation to Hold Allotment Trading Units (ATUs)	
	6.4 Market Transactions	
	6.5 Emissions Excursion Compensation	
	6.6 Quantification of Seasonal VOM Emissions	
	6.7 Annual Account Reporting	
	6.8 Allotment of ATUs to the Source	
	6.9 Recordkeeping for ERMS	
	6.10 Federal Enforceability	
	6.11 Exclusions from Further Reductions	
7.0	UNIT SPECIFIC CONDITIONS	27
	7.1 Unit 01 – Group 1 Storage Tanks	
	Control 01 – Condensers, Internal Floating Roofs	
	7.2 Unit 02 – Group 2 & 3 Storage Tanks	
	Control 02 - PVRV	

PAGE

7.3 Unit 03 – Group 4 Storage Tanks
Control 03 – PVRV and Condenser
7.4 Unit 04 – Group 5 Storage Tanks
Control 04 - None
7.5 Unit 05 – A 16,000 Gallons Perchlorethylene Storage Tank and Perchlorethylene Filling Lines
Control 05 – Activated Carbon Fume Collector System
7.6 Unit 06 – Chemical Loading Stations #1-42
Control 06 – None
7.7 Unit 07 – Antifreeze Packaging Lines
Control 07 - None
7.8 Unit 08 – HDPE Line
Control 08 – Filter Unit System
7.9 Unit 09 - Boilers #1 & 2
Control 09 - None
7.10 Unit 10 – Fugitive Emissions
Control 10 – Spraying of Calcium Chloride

8.0 GENERAL PERMIT CONDITIONS 92

8.1 Permit Shield
8.2 Applicability of Title IV Requirements
8.3 Emissions Trading Programs
8.4 Operational Flexibility/Anticipated Operating Scenarios
8.5 Testing Procedures
8.6 Reporting Requirements
8.7 Obligation to Comply with Title I Requirements

9.0 STANDARD PERMIT CONDITIONS 97

9.1 Effect of Permit
9.2 General Obligations of Permittee
9.3 Obligation to Allow Illinois EPA Surveillance
9.4 Obligation to Comply with Other Requirements
9.5 Liability
9.6 Recordkeeping
9.7 Annual Emissions Report
9.8 Requirements for Compliance Certification
9.9 Certification
9.10 Defense to Enforcement Actions
9.11 Permanent Shutdown
9.12 Reopening And Reissuing Permit For Cause
9.13 Severability Clause
9.14 Permit Expiration and Renewal

10.0 ATTACHMENTS

10.1 Attachment 1 - Certification by a Responsible Official 1-1

1.0 SOURCE IDENTIFICATION

1.1 Source

IMTT-Lemont
13589 Main Street, P.O. Box 727,
Lemont, Illinois 60439
Phone # (630)257-6222

I.D. No.: 031806AAG
Standard Industrial Classification: 4226, Special warehousing and storage, not elsewhere classified

1.2 Owner/Parent Company

IMTT - Lemont
13589 Main Street
Post Office Box 727
Lemont, Illinois 60439

1.3 Operator

IMTT-Lemont
13589 Main Street
Lemont, Illinois 60439

Contact Person: Jerome Nickleski, Environmental Manager
Contact Phone: (630)257-3960

1.4 General Source Description

IMTT-Lemont is located at 13589 Main Street in Lemont (Cook County). The source is a bulk storage and transfer terminal. The terminal consists of 140 storage tanks, a marine dock, rail and truck loading stations, a plastic bottles manufacturing line, an antifreeze packaging operation and two boilers. Air pollution control equipment includes condensers, activated carbon fume collector system and filter unit system.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
Agency	Illinois Environmental Protection Agency
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATUs	Allotment Trading Units
BAT	Best Available Technology
Btu	British thermal unit
C	Adjustment factor for small diameter tanks
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
CO	Carbon Monoxide
D	Tank Diameter
dT	Average ambient diurnal temperature change, ^{o}F
ERMS	Emission Reduction Market System
^{o}F	Degree Fahrenheit
Fp	Paint Factor, dimensionless
ft^3	Cubic Feet
H	Average vapor space height, ft.
HAP	Hazardous Air Pollutant
HDPE	High Density Polyethylene
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
IEPA	Illinois Environmental Protection Agency
Illinois EPA	Illinois Environmental Protection Agency
Kc	Product Factor
Kn	Turnover Factor
kW	kilowatts
L	Liter
Lb	Breathing Loss
Lt	Total Loss
Lw	Working Loss
LAER	Lowest Achievable Emission Rate
lb	pound
m^3	Cubic Meters
MACT	Maximum Achievable Control Technology
Mft^3	Million Cubic Feet
Mg	Megagram
Mv	Molecular Weight of Vapor in Storage Tank
mmBtu	Million British thermal units
N	Number of turnovers per year

NESHAP	National Emission Standards for Hazardous Air Pollutants
N.G.	Natural Gas
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
P	True vapor pressure at bulk liquid conditions
Pa	Average atmospheric pressure
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
PVRV	Positive Vapor Relief Valve
RMP	Risk Management Plan
SCF	Standard Cubic Feet
SO_2	Sulfur Dioxide
T	Tons
TH	Throughput
T1	Title I – identifies Title I conditions that have been carried over from an existing construction permit
T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing construction permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
wt%	Weight Percent
yr	Year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

Two (2) units of N.G. Fired Furnaces with 0.125 mmBtu/hr heat input capacity individually.

Six (6) units of N.G. Fired Furnaces with 0.800 mmBtu/hr heat input capacity individually.

One (1) unit of N.G. Fired Furnace with 0.060 mmBtu/hr heat input capacity.

One (1) unit of N.G. Fired Furnace with 0.175 mmBtu/hr heat input capacity.

Three (3) units of N.G. Fired Furnaces with 0.150 mmBtu/hr heat input capacity individually.

One (1) unit of N.G. Fired Furnace with 0.120 mmBtu/hr heat input capacity.

Three (3) units of N.G. Fired Heaters with 0.05 mmBtu/hr heat input capacity individually.

Four (4) units of N.G. Fired Heaters for tank #231-232 with individual heat input capacity less than 1 mmBtu/hr.

Eight (8) units of N.G. Fired Heaters for tanks #226 & 227 with individual heat input capacity less than 1 mmBtu/hr.

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:

None

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that

fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

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

3.2 Compliance with Applicable Requirements

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

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit’s process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a)and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Group 1A Storage Tanks Tanks 228, 252, 412, 413, 414, 421, and 422 Group 1B Storage Tanks 8 and 235	Nine (9) chemical storage tanks with capacity greater than 40,000 gallons and maximum true vapor pressure greater than 0.75 psia.	8 – 1979 235 – 1981 Remaining tanks installed between 1963 - 1979	Condensers, internal floating roofs
Group 2/3A Storage Tanks 4, 5, 6, 7, 199, 200, 236, 237, 238, 239, 240, 251, and 427 Group 2/3B Storage Tanks 217, 218, 219, 233, 234, and 426 Group 2/3C Storage Tanks 1, 2, 43, 206, 223, 224, 229, 230, 253, 411, 415, 416, 417, 423, 424, 425, 17, 34, 36, 39, 40, 41, 44, 48, 49, 201-205, 207-213, 221, 225-227, 231, and 232 Group2/3D Storage Tanks 600, 601, and 222	Sixty-five (65) chemical storage tanks with design storage capacity greater than 40,000 gallons and vapor pressure less than 0.75 psia.	236 through 240 – 1981 251 – 1982 600 – 1995 601 – 1995 222 - 2000 Remaining tanks installed between 1955 - 1979	Positive Vapor Relief Valves (PVRV) are equipped on twenty-seven (27) tanks. The remaining thirty-eight (38) tanks are uncontrolled

Emission Unit	Description	Date Constructed	Emission Control Equipment
Group 4A Storage Tanks Tanks 3, 111-113, 214, 215, and 241-250, 500, 519, 50-54, 101, c-1, c-2, c-3, and 63 Group 4B Storage Tanks Tanks 501-518, 520, 521, BH #1, BH #2, pm1, pm2, and 602-607	Fifty seven (57) chemical storage tanks with design storage capacity less than 40,000 gallons.	500 through 520 - 1987 521 - 1994 BH#1 – 1987 BH#2 – 1987 pm1 – 1987 pm2 – 1987 53 – 1989 54 - 1988 602 through 607 - 1995 Remaining tanks installed between 1959 - 1979	PVRV's
Group 5 Storage Tanks Tank #522-529	Eight (8) tanks total	522 through 525 - 1994 526 through 528 - 1995 529 – 1995	None
16,000 Gallon Perchlorethylene Storage Tank (#530) and Perchlorethylene Filling Lines	A perchlorethylene storage tank and two (2) filling lines	530 - 1995	Activated carbon fume collector system
Chemical Loading Stations #1-42[1]	Chemical loading stations	1955-1994	None

Emission Unit	Description	Date Constructed	Emission Control Equipment
Antifreeze Packing Lines	Six (6) Antifreeze Blending Kettles, Antifreeze Drum Filling Lines 1 & 2, Antifreeze Bottle Filling Line	1984-1999	None
HDPE Resin Vacuum/Blow Molding System	Production of the plastic bottles	1987	Filter unit system
Boilers #1 & 2	Production of steam in natural gas boilers	1961	None
Fugitive Part and VOM Emissions	3.66 miles roadways, pumps, valves, flanges, etc	-	$CaCl_2$

[1] Loading stations #1-26, 28-30, 32-34, 36-39, 41 & 42 were constructed between 1955-1987; loading station #40 was constructed in 1991; and loading stations #27, 31, and 35 were constructed in 1994.

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

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

5.1.2 This permit is issued based on the source being a major source of HAPs.

5.2 Applicable Regulations

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

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

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

b. i. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].

ii. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

iii. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

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

d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm [35 IAC 214.301].

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

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

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

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

5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC 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 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, 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.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section; and

ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or

iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 PM_{10} Contingency Measure Plan

Should this stationary source, as defined in 35 IAC 212.700, become subject to the requirement to prepare and submit a contingency measure plan reflecting the PM_{10} emission reductions as set forth in 35 IAC 212.703, then the owner or operator shall submit such plan to the Illinois EPA for review and approval within ninety (90) days after the date this source becomes subject to this requirement. Such plan will be incorporated by reference into this permit and shall be implemented in accordance with 35 IAC 212.704. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U, incorporated herein by reference.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	143.36
Sulfur Dioxide (SO_2)	1.65
Particulate Matter (PM)	96.20
Nitrogen Oxides (NO_x)	17.00
HAP, not included in VOM or PM	-
TOTAL	258.21

5.5.2 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.

5.5.3 Other Source-Wide Emission Limitations

The following tanks and loading racks constructed between the contemperaneous time period of 1995 – 1990 shall not exceed 24.9 ton/yr of VOM emissions in accordance with 35 IAC Part 203. [530, 529, 526-528, 522-525, 600-607, and 521 and loading racks 27, 31, 35 and 40]

The following tanks and loading racks constructed between the contemperaneous time period of 1989 – 1984 shall not exceed 39.9 ton/yr of VOM emissions in accordance with 35 IAC Part 203. [500-520, BH#1, BH#2, pm1, pm2, 53, and 54 and loading racks 34 and 36]

The following tanks and loading racks constructed between the contemperaneous time period of 1983 – 1978 shall not exceed 39.9 ton/yr of VOM emissions in accordance with 35 IAC Part 203. [251, 236-240, 235, and 8 and loading racks 4, 5, 6, 11, 13, 18, 22, 23, 24, 25, 26, 28 and 29]]

The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the VOM emissions from the affected sources below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

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

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for Operating Scenarios

None

5.6.3 Retention and Availability of Records

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

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

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance 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.

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

None

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

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

a. For the purpose of estimating fugitive particular matter emissions from the paved road at the source, the emission factors found in AP-42 are acceptable.

b. For the purpose of estimating HAP emissions from equipment at the source, the vapor weight percent (based on a 1992 USEPA survey) of each HAP for each product times the VOM emissions contributed by that product is acceptable.

6.0 EMISSION REDUCTION MARKET SYSTEM (ERMS)

6.1 Description of ERMS

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

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

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

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

6.2 Applicability

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

6.3 Obligation to Hold Allotment Trading Units (ATUs)

a. Pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, and as further addressed by condition 6.8, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30) not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 6.

i. VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit, in accordance with 35 IAC 205.220;

ii. Excess VOM emissions associated with startup, malfunction or breakdown of an emission unit as authorized in section 7.0 of this permit, in accordance with 35 IAC 205.225;

iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3);

iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 IAC 205.750; and

v. VOM emissions from certain new and modified emission units as addressed by Section 6.8(b), if applicable, in accordance with 35 IAC 205.320(f).

b. Notwithstanding the above condition, in accordance with 35 IAC 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 IAC Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions in Section 7.0 of this permit.

6.4 Market Transaction

a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any market transactions, as specified at 35 IAC 205.610(a).

b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 IAC 205.610(b).

c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 IAC 205.620(a).

d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA in accordance with 35 IAC 205.620 and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

6.5 Emission Excursion Compensation

Pursuant to 35 IAC 205.720, if the source fails to hold ATUs in accordance with Condition 6.3, it shall provide emissions excursion compensation in accordance with the following:

a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:

i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or

ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emission excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.

b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.

c. Pursuant to 35 IAC 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source’s next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

6.6 Quantification of Seasonal VOM Emissions

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

No exceptions

b. The Permittee shall report emergency conditions at the source to the Illinois EPA in accordance with 35 IAC 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 IAC 205.750(a), and shall be submitted in accordance with the following:

i. An initial emergency condition report within two days after the time when such excess emissions occurred due to the emergency; and

ii. A final emergency condition report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.

6.7 Annual Account Reporting

a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emission Report, seasonal VOM emission information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 IAC 205.300]:

i. Actual seasonal emissions of VOM from the source;

ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;

iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 IAC 205.337;

iv. If a source has experienced an emergency, as provided in 35 IAC 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;

v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order or CAAPP permit Compliance Schedule, as provided for in 35 IAC 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3); and

vi. If a source is operating a new or modified emission unit for which three years of operational data is not

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

b. This report shall be submitted by October 31 of each year, for the preceding seasonal allotment period.

6.8 Allotment of ATUs to the Source

a. i. The allotment of ATUs to this source is 118 ATUs per seasonal allotment period.

ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 13.39 tons.

iii. The source's allotment reflects 88% of the baseline emissions (12% reduction) except for the VOM emissions from specific emission unit excluded from such reduction, pursuant to 35 IAC 205.405 including units complying with MACT or using BAT, as identified in Condition 6.11 of this permit.

iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period during issuance and, if not retired in this season, the next seasonal allotment period.

v. Condition 6.3(a) becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.

b. Contingent Allotments for New or Modified Emission Units

The source was not issued a construction permit prior to January 1, 1998 for the following new or modified emission units for which three years of operational data is not yet available:

Emission Unit	Construction Permit #	Date Issued
Methylene Chloride Vapor Condenser	99010019	February 23, 1999

In accordance with 35 IAC Part 205, for the above referenced emission units, the source is required to hold the appropriate amount of ATU's for these emission units.

c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 IAC Part 205, including:

i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;

ii. Deduction of ATUs as a consequence of emission excursion compensation, in accordance with 35 IAC 205.720; and

iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

6.9 Recordkeeping for ERMS

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

a. Seasonal component of the Annual Emission Report;

b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.6(a); and

c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

6.10 Federal Enforceability

Section 6 becomes federally enforceable upon approval of the ERMS by USEPA as part of Illinois' State Implementation Plan.

6.11 Exclusions from Further Reductions

a. VOM emissions from the following emission units, shall be excluded from the VOM emissions reductions requirements specified in IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 205.405(a)]:

i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;

ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units and internal combustion engines; and

iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

The source has demonstrated in their ERMS application and the Illinois EPA has determined that the following

emission units qualifies for exclusion from further reductions because they meet the criteria as indicated above [35 IAC 205.400(a) and (c)]:

None

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

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

None

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01 - Group 1 Storage Tanks
Control 01 – Condensers, Internal Floating Roofs.

7.1.1 Description

Group 1A and 1B storage tanks are nine (9) tanks with storage capacity greater than 40,000 gallons. They are used to store various types of chemicals or petroleum liquids. Tanks 228 and 252 are fixed roof tanks which are controlled by condensers. The remaining tanks are internal floating roofs. Group 1A and 1B storage tanks were constructed between 1963-1981.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Group 1A Storage Tanks Tanks 228, 252, 412, 413, 414, 421, and 422 Group 1B Storage Tanks Tanks 8 and 235	Nine (9) chemical storage tanks with capacity greater than 40,000 gallons and maximum true vapor pressure greater than 0.75 psia.	8 – 1979 235 – 1981 Remaining tanks installed between 1963 - 1979	Condensers, internal floating roofs

7.1.3 Applicability Provisions and Applicable Regulations

a. The “affected group 1A and 1B storage tanks” for the purpose of these unit-specific conditions, are nine (9) chemical storage tanks listed in Condition 7.1.2.

b. The affected group 1A and 1B storage tanks are subject to 35 IAC 218 Subpart B which is addressed further in the following conditions.

c. 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 218.108, or unless such tank is a pressure tank as described in 35 IAC 218.121(a) or is fitted with a recovery system as described in 35 IAC 218.121(b)(2). [35 IAC 218.122(b)]

d. The affected group 1B storage tanks are subject to the New Source Performance Standards (NSPS) for Standard of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, 40 CFR 60, Subpart Ka, because the affected 1B storage tanks were constructed after May 18, 1978 and have storage volumes greater than 40,000 gallons.

7.1.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected group 1A storage tanks not being subject to the New Source Performance Standards (NSPS) for Standard of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973 – May 19, 1978, 40 CFR 60, Subpart K, because the affected group 1A and 1B storage tanks were constructed prior to June 11, 1973.

b. This permit is issued based on the affected group 1A storage tanks not being subject to the New Source Performance Standards (NSPS) for Standard of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 – July 23, 1984, 40 CFR 60, Subpart Ka, because the affected group 1A storage tanks were constructed prior to May 18, 1978.

c. This permit is issued based on the affected group 1A and 1B storage tanks not being subject to the New Source Performance Standards (NSPS) for Standard of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60, Subpart Kb, because the affected group 1A and 1B storage tanks were constructed before July 23, 1984.

7.1.5 Control Requirements

a) Every owner or operator storing VOL in a vessel of 40,000 gallons or greater with a maximum true vapor pressure equal to 0.75 psia but less than 11.1 psia shall reduce VOM emissions from storage tanks,

reservoirs, or other containers as follows: [35 IAC 218.120]

1) Each fixed roof tank shall be equipped with an internal floating roof that meets the following specifications or that is equipped with a vapor control system that meets the specifications contained in Condition 7.1.5(a)(3) below:

   A) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

   B) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

      i) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;

      ii) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous; or

      iii) A mechanical shoe seal, which is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is

connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

C) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

D) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

E) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

F) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

G) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

H) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2) During the next scheduled tank cleaning or before March 15, 2004, whichever comes first, each internal floating roof tank shall meet the specifications set forth in Condition 7.1.5(a)(1)(A) through (H) above.

3) A closed vent system and control device respectively shall meet the following specifications:

A) The closed vent system shall be designed to collect all VOM vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 40 CFR 60.485(c), incorporated by reference at Section 218.112(d) of 35 IAC 218 Subpart A.

B) The control device shall be designed and operated to reduce inlet VOM emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of 40 CFR 60.18, incorporated by reference at Section 218.112(d) of 35 IAC 218 Subpart A.

4) An alternative emission control plan equivalent to the requirements of Condition 7.1.5(a)(1), (a)(2) or (a)(3) above that has been approved by the Agency and the USEPA in a federally enforceable permit or as a SIP revision.

b) The owner or operator of each storage vessel with a design capacity equal to or greater than 40,000 gallons which contains VOL that, as stored, has a maximum true vapor pressure greater than or equal to 11.1 psia shall equip each storage vessel with a closed vent system and control device as specified in Condition 7.1.5(a)(3) above.

c) Notwithstanding Condition 7.1.5(b), where an owner or operator can demonstrate that the control device installed on a storage vessel on or before December 31, 1992, was designed to reduce inlet VOM emissions by greater than or equal to 90 percent but less than 95 percent, the control device shall be operated to reduce inlet VOM emission by 90 percent or greater.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected group 1 storage tanks are subject to the following:

Emissions from the specificed storage tank shall not exceed the following limits:

Tank #	VOM Emissions (lb/month)	VOM Emissions (Ton/Year)
8	1000	5.0

The above limitations were established in Permit 83010031, 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].

7.1.7 Testing Requirements

The owner or operator of each storage vessel specified in Section 218.119 of 35 IAC Subpart B shall comply with the requirements of condition 7.1.7(a) or (b) below. The applicable subsection for a particular storage vessel depends on the control equipment installed to meet the requirements of 35 IAC Subpart B. [35 IAC 218.127]

a) After installing the control equipment necessary for the source to comply with the requirements of Condition 7.1.5(a)(1) or (2) (permanently affixed roof and internal floating roof), each owner or operator shall:

1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service) prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

2) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or if there is

liquid accumulated on the roof, or if the seal is detached, or if there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in Condition 7.1.7 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the owner or operator may request a 30-day extension from the Agency in the inspection report required in Condition 7.1.9(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the owner or operator will take that will assure that the control equipment will be repaired or the vessel will be emptied within 60 days.

3) For vessels equipped with both primary and secondary seals:

A) Visually inspect the vessel as specified in Condition 7.1.7(a)(4) below at least every 5 years; or

B) Visually inspect the vessel as specified in Condition 7.1.7(a)(2) above.

4) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal, or if the seal fabric or the secondary seal has holes, tears, or other openings in the seal, or if the seal fabric or the gaskets no longer close off the liquid surfaces from the atmosphere, or if the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this subsection exists before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in Condition 7.1.7(a)(2) and (a)(3)(B) above and at intervals no greater than 5 years in the case

of vessels specified in Condition 7.1.7(a)(3)(A) above.

5) Notify the Agency in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by Condition 7.1.7(a)(1) and (a)(4) above to afford the Agency the opportunity to have an observer present. If the inspection required by Condition 7.1.7(a)(4) above is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Agency at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Agency at least 7 days prior to the refilling.

b) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements of Condition 7.1.5(a)(3) shall meet the requirements specified in the general control device requirements of 40 CFR 60.18(e) and (f), incorporated by reference at Section 218.112(d) of 35 IAC 218 Subpart A.

7.1.8 Monitoring Requirements

a) Except as provided in Condition 7.1.8(d) below, the owner or operator of each storage vessel with a design capacity greater than or equal to 40,000 gallons storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia shall notify the Agency within 30 days when the maximum true vapor pressure of the liquid exceeds 0.75 psia. [35 IAC 218.128]

b) Available data on the storage temperature may be used to determine the maximum true vapor pressure.

1) 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.

2) For other liquids, the vapor pressure:

A) Determined by ASTM Method D2879-83, incorporated by reference at Section 218.112(a)(1) of 35 IAC 218 Subpart A;

B) Measured by an appropriate method approved by the Agency and USEPA; or

C) Calculated by an appropriate method approved by the Agency and USEPA.

c) The owner or operator of each vessel storing a mixture of indeterminate or variable composition shall be subject to the following:

1) 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 7.1.8(b) above.

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, incorporated by reference at Section 218.112(a)(1) of 35 IAC 218 Subpart A;

B) ASTM Method D323-82, incorporated by reference at Section 218.112(a)(25) of 35 IAC 218 Subpart A; or

C) As measured by an appropriate method approved by the Agency.

d) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specifications of Condition 7.1.5 is exempt from the requirements of Conditions 7.1.8(a) and (b) above.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected group 1 storage tanks to demonstrate

compliance with Conditions 5.5.1 and 7.1.7, pursuant to Section 39.5(7)(b) of the Act:

[a] (a) After installing control equipment in accordance with Condition 7.1.5(a)(1) or (2) (fixed roof and internal floating roof), the owner or operator shall: [35 IAC 218.129]

1) Furnish the Agency with a report that describes the control equipment and certifies that the control equipment meets the specifications of Condition 7.1.5(a)(1) and Condition 7.1.7(a)(1);

2) Keep a record of each inspection performed as required by Condition 7.1.7(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings);

3) If any of the conditions described in Condition 7.1.7(a)(2) are detected during the annual visual inspection required by Condition 7.1.7(a)(2), report to the Agency within 30 days after the inspection the identity of the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made; and

4) After each inspection required by Condition 7.1.7(a)(3) where holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in Condition 7.1.7(a)(3)(B) are discovered, report to the Agency within 30 days after the inspection the identity of the storage vessel and the reason it did not meet the specifications of Condition 7.1.5(a)(1) or (2) or Condition 7.1.7(a), and list each repair made.

b) After installing control equipment in accordance with Condition 7.1.7(a)(4) (closed vent system and control device other than a flare), the owner or operator shall maintain the following records:

1) A copy of the operating plan; and

2) The measured values of the parameters monitored in accordance with Condition 7.1.8(c)(2).

c) After installing a closed vent system and flare to comply with Condition 7.1.7, the owner or operator shall:

1) Provide the Agency with a report containing the measurements required by 40 CFR 60.18(f)(1), (2), (3), (4), (5), and (6), incorporated by reference at Section 218.112(d) of 35 IAC 218 Subpart A, within 6 months after the initial start-up date;

2) Maintain records of all periods of operation during which the flare pilot flame is absent; and

3) Report semiannually all periods recorded under 40 CFR 60.115b(d)(2), incorporated by reference at Section 218.112(d) of 35 IAC 218 Subpart A, in which the pilot flame was absent.

d) The owner or operator shall maintain all records required by this Condition, except for the records required by Condition 7.1.9(e) below, for at least 3 years. The records required by subsection (e) below shall be kept for the life of the source.

e) The owner or operator of each storage vessel specified in Section 218.119 of 35 IAC 218 Subpart B shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of this condition other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.

f) Except as provided in Condition 7.1.8(c) and (d), the owner or operator of each storage vessel subject to the requirements in Condition 7.1.5 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.

[b] Records of the maintenance and operation of the condensers including any addition and replacement of the equipment.

[c] The throughput of the affected group 1 tanks in gal/mo and gal/yr.

[d] The annual VOM emissions from each affected group 1 tank based on the material stored, the tank throughput, the material vapor pressure and molecular weight, and the applicable emission factors and formulas with supporting calculations.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected group 1 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:

a. If any of the conditions described in Condition 7.1.7 are detected during the annual visual inspection required by Condition 7.1.7, report to the Illinois EPA within 30 days after the inspection the identity of the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made [35 IAC 218.129(a)(3)].

b. After each inspection required by Conditions 7.1.7 where holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in Condition 7.1.7 are discovered, report to the Illinois EPA within 30 days after the inspection the identity of the storage vessel and the reason it did not meet the specifications of Conditions 7.1.5(a) or 7.1.7(a), and list each repair made [35 IAC 218.129(a)(4)].

c. The Permittee shall submit to the Illinois EPA as a minimum, annual reports detailing the nature, specific emission units and total annual quantities of all specified air contaminant emissions; provided, however, that the Illinois EPA may require more frequent reports where necessary to accomplish the

purposes of the Act and 35 IAC 201 Subpart K [35 IAC 201.302(a)].

d. Any record showing violation of the VOM limits as defined in Condition 7.1.6 and Condition 5.5.3 shall be reported by sending a copy of such record to the Illinois EPA within thirty (30) days following the occurrence of the violation.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee may store any liquid inorganic or organic product in the affected Group 1 storage tanks, provided that the control requirements of Condition 7.1.5 are met and that the emission limitations in Condition 7.1.6 are not exceeded.

7.1.12 Compliance Procedures

a. Compliance with Conditions 7.1.6 and 5.5.1 shall be based on the recordkeeping requirements in Condition 7.1.9[c] & [d], and the method listed below:

For the purpose of estimating VOM emissions from the affected group 1 storage tanks, the current version of the TANKS program is acceptable.

7.2 Unit 02 - Group 2 & 3 Storage Tanks
Control 02 – Positive Vapor Relief Valves (PVRV)

7.2.1 Description

Group 2 & 3 storage tanks include sixty five (65) fixed roof cylindrical tanks and are used to store different types of chemicals. All sixty five (65) tanks have storage capacity greater than 40,000 gallons with vapor pressures of less than 0.75 psia. Twenty seven (27) storage tanks are equipped with PVRV's. Thirty eight (38) storage tanks are not controlled by any emission control equipment. Group 2/3 storage tanks were constructed between 1955-2000.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Group 2/3A Storage Tanks 4, 5, 6, 7, 199, 200, 236, 237, 238, 239, 240, 251, 427 Group 2/3B Storage Tanks 217, 218, 219, 233, 234, 426 Group 2/3C Storage Tanks 1, 2, 43, 206, 223, 224, 229, 230, 253, 411, 415, 416, 417, 423, 424, 425, 17, 34, 36, 39, 40, 41, 44, 48, 49, 201-205, 207-213, 221, 225-227, 231, and 232 Group 2/3D Storage Tanks 600, 601, and 222	Sixty five (65) chemical storage tanks with design storage capacity greater than 40,000 gallons and vapor pressure less than 0.75 psia.	236 through 240 – 1981 251 – 1982 600 – 1995 601 - 1995 222 - 2000 Remaining tanks installed between 1955 - 1979	Positive Vapor Relief Valves (PVRV) are equipped on twenty-seven (27) tanks. The remaining thirty-eight (38) tanks are uncontrolled

7.2.3 Applicability Provisions and Applicable Regulations

[a] The “affected group 2/3 storage tanks” for the purpose of these unit-specific conditions, are sixty-five (65) chemical storage tanks listed in Condition 7.2.2.

[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 218.108, or unless such tank is a pressure tank as described in 35 IAC 218.121(a) or is fitted with a recovery system as described in 35 IAC 218.121(b)(2).

[c] Affected group 2/3A tanks are subject to the New Source Performance Standards (NSPS) for Standard of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after May 18, 1978, 40 CFR 60, Subpart Ka, because the affected group 2/3A storage tanks are greater than 40,000 gallon and construction commenced after May 18, 1978.

[d] Affected group 2/3B tanks are subject to the New Source Performance Standards (NSPS) for Standard of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and prior to May 19, 1978, 40 CFR 60, Subpart K, because the affected group 2/3 storage tanks are greater than 65,000 gallon and construction commenced after June 11, 1973 but prior to May 19, 1978.

[e] Affected group 2/3D Attachment A is subject to the New Source Performance Standards (NSPS) for Volatile Organic liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification commenced after July 23, 1984, 40 CFR 60, Subpart Kb, because the affected storage tank is greater than 40,000 gallons and constructed after July 23, 1984.

[f] (a) The owner or operator of each storage vessel to which 40 CFR 60 Subpart Ka applies which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage

vessel with one of the following: [40 CFR 60 Subpart Ka]

(1) An external floating roof, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is equipped with a closure device between the tank wall and the roof edge. Except as provided in paragraph (a)(1)(ii)(D) of Condition 7.2.3[e], the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal. The roof is to be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(1) The primary seal is to be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. Each seal is to meet the following requirements:

(A) The accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 cm2 per meter of tank diameter (10.0 in2 per ft of tank diameter) and the width of any portion of any gap shall not exceed 3.81 cm (1½ in).

(B) The accumulated area of gaps between the tank wall and the vapor-mounted seal shall not exceed 21.2 cm2 per meter of tank diameter (1.0 in2 per ft of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (½ in).

(C) One end of the metallic shoe is to extend into the stored

liquid and the other end is to extend a minimum vertical distance of 61 cm (24 in) above the stored liquid surface.

(D) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (a)(1)(ii)(B) of Condition 7.2.3[e].

(B) The accumulated area of gaps between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed 21.2 cm2 per meter of tank diameter (1.0 in2 per ft. of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (½ in.). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal.

(C) There are to be no holes, tears or other openings in the seal or seal fabric.

(D) The owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal.

(iii) Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface. Each opening in the roof except for automatic bleeder vents, rim space vents and leg sleeves is to be equipped with a cover, seal or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use or as described in paragraph (a)(1)(iv) of Condition 7.2.3[e]. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting.

(iv) Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(2) A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the cover is floating

except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

(3) A vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of Condition 7.2.3[e] as provided in 40 CFR 60.114a.

(b) The owner or operator of each storage vessel to which 40 CFR 60 Subpart Ka applies which contains a petroleum liquid which, as stored, has a true vapor pressure greater than 76.6 kPa (11.1 psia), shall equip the storage vessel with a vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.

[g] (a) The owner or operator of any storage vessel to which 40 CFR 60 Subpart K applies shall store petroleum liquids as follows: [40 CFR 60 Subpart Ka]

(1) If the true vapor pressure of the petroleum liquid, as stored, is equal to or greater than 78 mm Hg (1.5 psia) but not greater than 570 mm Hg (11.1 psia), the storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalents.

(2) If the true vapor pressure of the petroleum liquid as stored is greater than 570 mm Hg (11.1 psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.

7.2.4 Non-Applicability of Regulations of Concern

a. The affected group 2/3A, 2/3B, 2/3C, 2/3D storage tanks are not subject to 35 IAC 218.120 pursuant to 35 IAC 218.119(a).

b. This permit is issued based on the affected group 2/3A, 2/3B, and 2/3C storage tanks not being subject to the New Source Performance Standards (NSPS) for Standard of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60, Subpart Kb, because the affected group 2/3 storage tanks were constructed before July 23, 1984.

7.2.5 Control Requirements

None

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected group 2/3D storage tank is subject to the following:

Emissions from the specified storage tank shall not exceed the following limits:

Tank #	VOM Emissions (Ton/Month)	(Ton/Yr)
222	1.63	19.5

The above limitations were established in Permit 00030096 pursuant to 35 IAC Part 203. These limits ensue 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]

7.2.7 Operating Requirements

[a] (a) Except as provided in 40 CFR 60.8(b) compliance with the standard prescribed in 40 CFR 60.112a shall be determined as follows or in accordance with an equivalent procedure as provided in 40 CFR 60.114a. [40 CFR 60 Subpart Ka]

(1) The owner or operator of each storage vessel to which 40 CFR 60 Subpart Ka applies which has an external floating roof shall meet the following requirements:

(i) Determine the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall according to the following frequency:

(A) For primary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every five years thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible.

(B) For secondary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every year thereafter.

(C) If any storage vessel is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill for the purposes of paragraphs (a)(1)(i)(A) and (a)(1)(i)(B) of Condition 7.2.7[a].

(D) Keep records of each gap measurement at the plant for a period of at least 2 years following the date of measurement. Each record shall identify the vessel on which the measurement was performed and shall contain

the date of the seal gap measurement, the raw data obtained in the measurement process required by paragraph (a)(1)(ii) of Condition 7.2.7[a] and the calculation required by paragraph (a)(1)(iii) of Condition 7.2.7[a].

(E) If either the seal gap calculated in accord with paragraph (a)(1)(iii) of Condition 7.2.7[a] or the measured maximum seal gap exceeds the limitations specified by 40 CFR 60.112a of 40 CFR 60 Subpart Ka, a report shall be furnished to the IEPA within 60 days of the date of measurements. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of 40 CFR 60.112a. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of 40 CFR 60.112a.

(ii) Determine gap widths in the primary and secondary seals individually by the following procedures:

(A) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

(B) Measure seal gaps around the entire circumference of the tank in each place where a ñ" diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location.

(C) The total surface area of each gap described in paragraph (a)(1)(ii)(B) of Condition 7.2.7[a] shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(iii) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the appropriate ratio in the standard in 40 CFR 60.112a(a)(1)(i) and 40 CFR 60.112a(a)(1)(ii).

(iv) Provide the IEPA 30 days prior notice of the gap measurement to afford the IEPA the opportunity to have an observer present.

(2) The owner or operator of each storage vessel to which 40 CFR 60 Subpart Ka applies which has a vapor recovery and return or disposal system shall provide the following information to the IEPA on or before the date on which construction of the storage vessel commences:

(i) Emission data, if available, for a similar vapor recovery and return or disposal system used on the same type of storage vessel, which can be used to determine the efficiency of the system. A complete description of the emission measurement method used must be included.

(ii) The manufacturer's design specifications and estimated emission reduction capability of the system.

(iii) The operation and maintenance plan for the system.

(iv) Any other information which will be useful to the IEPA in evaluating the effectiveness of the system in reducing VOC emissions.

[b] (a) If, in the IEPA's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in 40 CFR 60.112a, the IEPA will publish in the FEDERAL REGISTER a notice permitting the use of the alternative means for purposes of compliance with that requirement. [40 CFR 60 Subpart Ka]

(b) Any notice under paragraph (a) of Condition 7.2.7[b] will be published only after notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall submit to the IEPA a written application including:

(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the IEPA determines is an accurate method of determining equivalence.

(d) The IEPA may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in 40 CFR 60.112a.

(e) The primary vapor-mounted seal in the "Volume-Maximizing Seal" manufactured by R.F.I. Services Corporation is approved as equivalent to the vapor-mounted seal required by 40 CFR 60.112a(a)(1)(i) and must meet the gap criteria specified in 40 CFR 60.112a(a)(1)(i)(B). There shall be no gaps between the tank wall and any secondary seal used in conjunction with the primary seal in the "Volume-Maximizing Seal".

7.2.8 Monitoring Requirements

[a] Except as provided in Condition 7.2.8[d] below, the owner or operator of each storage vessel with a design capacity greater than or equal to 40,000 gallons storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia shall notify the Agency within 30 days when the maximum true vapor pressure of the liquid exceeds 0.75 psia. [35 IAC 218.128]

[b] Available data on the storage temperature may be used to determine the maximum true vapor pressure.

1) 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.

2) For other liquids, the vapor pressure:

A) Determined by ASTM Method D2879-83, incorporated by reference at Section 218.112(a)(1) of 35 IAC 218 Subpart A;

B) Measured by an appropriate method approved by the Agency and USEPA; or

C) Calculated by an appropriate method approved by the Agency and USEPA.

[c] The owner or operator of each vessel storing a mixture of indeterminate or variable composition shall be subject to the following:

1) 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[b] above.

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, incorporated by reference at Section 218.112(a)(1) of 35 IAC 218 Subpart A;

B) ASTM Method D323-82, incorporated by reference at Section 218.112(a)(25) of 35 IAC 218 Subpart A; or

C) As measured by an appropriate method approved by the Agency.

[d] The owner or operator of each vessel equipped with a closed vent system and control device meeting the specifications of 35 IAC 218.120 is exempt from the requirements of Conditions 7.2.8[a] and [b] above.

[e] (a) Except as provided in paragraph (d) of Condition 7.2.8[e], the owner or operator subject to 40 CFR 60 Subpart Ka and Kb shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. [40 CFR 60 Subpart Ka and Kb]

(b) Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the IEPA specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(c) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

(d) The following are exempt from the requirements of Condition 7.2.8[e]:

(1) Each owner or operator of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

(2) Each owner or operator of each storage vessel equipped with a vapor recovery and return or disposal system in accordance with the requirements of 40 CFR 60.112a (a)(3) and (b).

[f] (a) Except as provided in paragraph (d) of Condition 7.2.8[f], the owner or operator subject to 40 CFR 60 Subpart K shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. [40 CFR 60 Subpart K]

(b) Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the IEPA specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(c) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

(d) The following are exempt from the requirements of Condition 7.2.8[f]:

(1) Each owner or operator of each affected facility which stores petroleum liquids with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

(2) Each owner or operator of each affected facility equipped with a vapor recovery and return or disposal system in accordance with the requirements of 40 CFR 60.112.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affect group 2/3 storage tanks to demonstrate

compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

a. The throughput of the affected group 2/3 storage tanks in gal/mo and gal/yr.

b. The annual emissions from each affected group 2/3 storage tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

c. The Permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR Subpart Kb]

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected group 2/3 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:

a. Except as provided in Condition 7.2.8[d], the owner or operator of each storage vessel with a design capacity greater than or equal to 40,000 gallons storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia shall notify the Agency within 30 days when the maximum true vapor pressure of the liquid exceeds 0.75 psia. [35 IAC 218.128]

b. The Permittee shall submit to the Illinois EPA as a minimum, annual reports detailing the nature, specific emission units and total annual quantities of all specified air contaminant emissions; provided, however, that the Illinois EPA may require more frequent reports where necessary to accomplish the purposes of the Act and 35 IAC 201 Subpart K [35 IAC 201.302(a)].

c. Any record showing violation of VOM limits as defined in Condition 5.5.3 shall be reported by sending a copy of such record to the Illinois EPA within thirty (30) days following the occurrence of the violation.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee may store any liquid inorganic or organic product in the affected Group 2/3 storage tanks, provided that the vapor pressure of the product does not exceed 0.75 psia.

7.2.12 Compliance Procedures

a. Compliance with Conditions 7.2.6 and 5.5.1 shall be based on the recordkeeping requirements in Condition 7.2.9, and the method listed below:

For the purpose of estimating VOM emissions from the affected group 2/3 storage tanks, the current version of the TANKS program is acceptable.

7.3 Unit 03 – Group 4 Storage Tanks
Control 03 – PVRV and Condenser

7.3.1 Description

Group 4 storage tanks consist of fifty-seven (57) cylindrical fixed roof tanks with storage capacity less than 40,000 gallons. Seventeen (17) tanks are equipped with PVRV's with the remaining forty-two (42) tanks uncontrolled.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Group 4A Storage Tanks Tanks 3, 111-113, 214, 215, and 241-250, 500, 519, 50-54, 101, c-1, c-2, c-3, and 63 Group 4B Storage Tanks Tanks 501-518, 520, 521, BH #1, BH #2, pm1, pm2, and 602-604	Fifty seven (57) chemical storage tanks with design storage capacity less than 40,000 gallons.	500 through 520 - 1987 521 - 1994 BH#1 – 1987 BH#2 – 1987 pm1 – 1987 pm2 – 1987 53 – 1989 54 – 1988 602 through 607 – 1995 Remaining tanks installed between 1959 – 1979	PVRV's

7.3.3 Applicability Provisions and Applicable Regulations

a. The "affected group 4A storage tanks" for the purpose of these unit-specific conditions, are tanks 3, 111-113, 214, 215, 242-250, 500, 519, 50-54, 101, c-1, c-2, c-3, and 63 as listed in Condition 7.3.2.

b. The "affected group 4B storage tanks" for the purpose of these unit-specific conditions, are tanks 501-518, 520, 521, BH#1, BH#2, pm1, pm2, and 600-607 as listed in Condition 7.3.2.

c. The "affected group 4B storage tanks" are subject to 40 CFR Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 because construction occurred during 1987 or beyond and all 4B tanks have a capacity of at least 10,568 gallons or greater.

These requirements may be found in Condition 7.3.9(e).

d. The affected group 4A storage tanks are subject to 35 IAC 218.129(f) since each tank has a storage capacity less than 40,000 gallons. These requirements may be found in Condition 7.3.9(d).

e. The Permittee shall not cause or allow the loading of any organic material into any affected 4A or 4B 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 218.108, or unless such tank is a pressure tank as described in 35 IAC 218.121(a) or is fitted with a recovery system as described in 35 IAC 218.121(b)(2). [35 IAC 218.122(b)]

7.3.4 Non-Applicability of Regulations of Concern

a. The affected group 4A & 4B storage tanks are not subject to 35 IAC 218.120 pursuant to 35 IAC 218.l19(g).

b. This permit is issued based on the affected group 4A & 4B storage tanks not being subject to the New Source Performance Standards (NSPS) for Standard of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973 – May 19, 1978, 40 CFR 60, Subpart K, because the affected group 4A & 4B storage tanks have capacities less than 40,000 gallons.

c. This permit is issued based the affected group 4A & 4B storage tanks not being subject to the New Source Performance Standards (NSPS) for Standard of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 – July 23, 1984, 40 CFR 60, Subpart Ka, because the affected group 4A & 4B storage tanks have capacities less than 40,000 gallons.

d. This permit is issued based on the affected group 4A storage tanks not being subject to the New Source Performance Standards (NSPS) for Standard of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR

60, Subpart Kb, because the affected group 4A storage tanks were constructed before July 23, 1984 or have capacities less than 10,568 gallons.

7.3.5 Control Requirements

N/A

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected group 4B storage tanks are subject to the following:

Emissions from the specific storage tanks shall not exceed the following limits:

Tank	Pollutant	(Lb/Month)	(Ton/Year)
505-521 (Combined)	VOM	33.33	0.2

Tank	Pollutant	(Ton/Month)	(Ton/Year)
pm1	VOM	0.44	0.44
pm2	VOM	0.44	0.44

The above limitations were established in Permits 87020062 and 92080126, 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].

7.3.7 Operating Requirements

None

7.3.8 Inspection Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected group 4A & 4B storage tanks to

demonstrate compliance with Conditions 5.5.1 and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

a. The type of material stored in the tanks with the vapor pressure.

b. The throughput of the tanks in gal/mo and gal/yr.

c. The annual emissions from each tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

d. The Permittee of each affected 4A tank shall maintain readily accessible records of the dimension of the affected tank and an analysis of the capacity of the affected group 4A storage tanks [35 IAC 218.129(f)].

e. The Permittee of affected group 4B storage tanks shall keep readily accessible records showing the dimension of the storage tanks and an analysis showing the capacity of the storage tanks. The records required will be kept for the life of the source [40 CFR 60.116(b)].

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected group 4A & 4B 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:

a. The Permittee shall submit to the Illinois EPA as a minimum, annual reports detailing the nature, specific emission units and total annual quantities of all specified air contaminant emissions; provided, however, that the Illinois EPA may require more frequent reports where necessary to accomplish the purposes of the Act and 35 IAC 201 Subpart K [35 IAC 201.302(a)].

b. Any record showing violation of the VOM limits as defined in Condition 7.3.6 and Condition 5.5.3 shall be reported by sending a copy of such record to the Illinois EPA within thirty (30) days following the occurrence of the violation.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee may store any liquid inorganic or non-HAP hydrocarbon product in the affected Group 4B storage

tanks, provided that the maximum true vapor pressure of the products does not exceed 2.175 psia and that the emission limits in Condition 7.3.6 are not exceeded.

7.3.12 Compliance Procedures

a. Compliance with Conditions 7.3.6 and 5.5.1 shall be based on the recordkeeping requirements in Condition 7.3.9, and the method listed below:

For the purpose of estimating VOM emissions from the affected group 4A & 4B storage tanks, the current version of the TANKS program is acceptable.

7.4 Unit 04 - Group 5 Storage Tanks
Control 04 - None

7.4.1 Description

Group 5 storage tanks are eight (8) cylindrical fixed roof tanks with no emission control equipment that were constructed between 1994 and 1995.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Group 5 Storage Tanks Tank #522-529	Eight (8) tanks total	522 through 525 – 1994 526 through 528 - 1995 529 – 1995	None

7.4.3 Applicability Provisions and Applicable Regulations

a. The “affected group 5 storage tanks” for the purpose of these unit-specific conditions, are eight (8) cylindrical fixed roof storage tanks listed in Condition 7.4.2.

b. The “affected group 5 storage tanks” are subject to 40 CFR Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 because construction occurred during 1994 or beyond and all group 5 tanks have a capacity of at least 15,000 gallons or greater. These requirements may be found in Condition 7.4.9(c).

c. The Permittee shall not cause or allow the loading of any organic material into any affected group 5 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 218.108, or unless such tank is a pressure tank as described in 35 IAC 218.121(a) or is fitted with a recovery system as described in 35 IAC 218.121(b)(2).

d. Affected group 5 tanks 522, 523, 524, 525, and 529 are subject to 35 IAC 218.129(f). These requirements may be found in Condition 7.4.9(d).

7.4.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected group 5 storage tanks not being subject to the New Source Performance Standards (NSPS) for Standard of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973 – May 19, 1978, 40 CFR 60, Subpart K, because the affected group 5 storage tanks were constructed after May 19, 1978.

b. This permit is issued based on the affected group 5 storage tanks not being subject to the New Source Performance Standards (NSPS) for Standard of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 – July 23, 1984, 40 CFR 60, Subpart Ka, because the affected group 5 storage tanks were constructed after July 23, 1984.

c. This permit is issued based on affected group 5 storage tanks 526, 527, and 528 not being subject to 35 IAC 218.120 due to the exemption in 35 IAC 218.119(a).

7.4.5 Control Requirements

None

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected group 5 storage tanks are subject to the following:

a. Emissions from the specific storage tanks shall not exceed the following limits:

	VOM Emissions	
Tank	(Ton/month)	(Ton/Year)
526	0.44	0.44
527	0.44	0.44
528	0.44	0.44
529	0.44	0.44

The above limitations were established in Permit 95050201, 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].

7.4.7 Operating Requirements

None

7.4.8 Inspection Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected group 5 storage tanks to demonstrate compliance with Conditions 5.5.1 and 7.4.3(b), pursuant to Section 39.5(7)(b) of the Act:

a. The type of material stored in the tanks with the vapor pressure.

b. The throughput of the tanks in gal/mo and gal/yr.

c. The Permittee of affected group 5 storage tanks shall keep readily accessible records showing the dimension of the storage tanks and an analysis showing the capacity of the storage tanks. The records required will be kept for the life of the source [40 CFR 60.116(b)].

d. The Permittee of each affected group 5 tank shall maintain readily accessible records of the dimension of the affected tank and an analysis of the capacity of the affected group 5 storage tanks [35 IAC 218.129(f)].

e. The annual emissions from each tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected group 5 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:

a. The Permittee of the affected group 5 storage tank shall notify the Illinois EPA within 30 days when the maximum true vapor pressure of the liquid exceeds 0.5 psia.

b. The Permittee shall submit to the Illinois EPA as a minimum, annual reports detailing the nature, specific emission units and total annual quantities of all specified air contaminant emissions; provided, however, that the Illinois EPA may require more frequent reports where necessary to accomplish the purposes of the Act and 35 IAC 201 Subpart K [35 IAC 201.302(a)].

c. Any record showing violation of the VOM limits as defined in Condition 7.4.6 and Condition 5.5.3 shall be reported by sending a copy of such record to the Illinois EPA within thirty (30) days following the occurrence of the violation.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee may store any liquid inorganic or organic product in the affected Group 5 storage tanks, provided that the vapor pressure of the product does not exceed 0.75 psia.

7.4.12 Compliance Procedures

a. Compliance with the Conditions 7.4.6 and 5.5.1 shall be based on the recordkeeping requirements in Condition 7.4.9(a) & (b), and the method listed below:

For the purpose of estimating VOM emissions from the affected group 5 storage tanks, the current version of the TANK program is acceptable.

7.5 Unit 05 - 16,000 Gallons Perchlorethylene Storage Tank and Perchlorethylene Filling Lines

Control 05 - Activated Carbon Fume Collector System

7.5.1 Description

Perchlorethylene is stored in tank 530 which has a storage capacity of 16,000 gallons and a vapor pressure of less than 0.5 psia. Tank 530 was constructed in 1995. Based on the above conditions, tank 530 is subject to a New Source Performance Standard (NSPS) for volatile organic liquid storage vessels, 40 CFR 60, Subpart Kb. There are two identical filling lines attached to tank 530. Tank 530 is equipped with an activated carbon fume collector system to capture the emission from the tank as well as the filling lines. Perchlorethylene is transferred into twenty (20) gallons drums through the filling lines. Each of the drums has two (2) openings on the top, one (1) for filling of the perchlorethylene and one (1) for vapor return back to the storage tank 530. The drums manufacturer's guarantee of 100% vapor return to tank 530 is assumed, therefore, there are no emissions from those filling lines.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
16,000 Gallon Perchlorethylene Storage Tank (#530) and Perchlorethylene Filling Lines	A perchlorethylene storage tank and two (2) filling lines	530 - 1995	Activated carbon fume collector system

7.5.3 Applicability Provisions and Applicable Regulations

a. An "affected operation" for the purpose of these unit-specific conditions, is a 16,000 gallon perchlorethylene storage tank, two identical perchlorethylene filling lines with a activated carbon fume collector system as emission control equipment as listed in Condition 7.5.2.

b. Pursuant to 40 CFR 60.110(b), an affected operation is required to comply with 40 CFR 60.116(b) which is addressed in the recordkeeping requirements of Condition 7.5.9. [40 CFR 60.110(b)]

c. An affected operation is subject to 35 IAC 218.122(b) which provides that:

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 218.108, or unless such tank is a pressure tank as described in 35 IAC 218.121(a) or is fitted with a recovery system as described in 35 IAC 218.121(b)(2).

7.5.4 Non-Applicability of Regulations of Concern

None

7.5.5 Control Requirements

The activated carbon fume collector system shall be designed and operated to reduce inlet VOM emissions by 95 percent or greater.

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected operation is subject to the following:

Emissions from the affected operation shall not exceed the following limits:

VOM Emissions	
(lb/hr)	(Ton/Year)
0.1	0.44

The above limitations were established in Permit 95040098, 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].

7.5.7 Operating Requirements

None

7.5.8 Inspection Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected operation to demonstrate compliance with Conditions 5.5.1 and 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

a. The Permittee of the affected operation shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage tanks. The record required will be kept for the life of the source [40 CFR 60.116(b)].

b. The owner or operator of each storage vessel specified in 35 IAC 218.119 shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of this Part other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel. [35 IAC 218.129(f)]

c. Throughput of the affected operation in gal/month and gal/yr.

d. The annual emissions from the tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.5.10 Reporting Requirements

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

a. The Permittee shall submit to the Illinois EPA as a minimum, annual reports detailing the nature, specific emissions and total annual quantities of all specified air contaminant emissions; provided, however, that the Illinois EPA may require more frequent reports where necessary to accomplish the purposes of the Act and 35 IAC 201 Subpart K.

b. Any record showing violation of the VOM limits as defined in Condition 7.5.6 and Condition 5.5.3 shall be reported by sending a copy of such record to the Illinois EPA within thirty (30) days following the occurrence of the violation.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee may store and fill any liquid inorganic or organic product in the affected tank provided emission limits in Section 7.5.6 are not exceeded.

7.5.12 Compliance Procedures

a. Compliance with Condition 7.5.3(b) shall be based on the recordkeeping requirement in Conditions 7.5.9.

b. Compliance with the Conditions 7.5.6 and 5.5.1 shall be based on the recordkeeping requirements in Condition 7.5.9, and method listed below:

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

7.6 Unit 06 - Chemical Loading Stations #1-42
Control 06 - None

7.6.1 Description

Chemical loading stations 1-39 were constructed between 1955-1987 and station 40 was constructed in 1991. All the loading stations are equipped with submerged loading pipes to transfer various types of chemical between storage tanks to tank trucks and/or rail cars. Station 40 is an inter-modal chemical loading station that transfers chemicals between tank trucks and rail cars only.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Loading Stations 1-39, 41 & 42	Loading organic and/or inorganic chemicals to tank trucks and rail cars.	None
Loading Station 40	Chemicals loading between tank trucks and rail cars.	None

7.6.3 Applicability Provisions and Applicable Regulations

The “affected loading stations” for the purpose of these unit-specific conditions, are forty two (42) chemical loading stations as described in 7.6.2.

7.6.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected loading stations not being subject to 35 IAC 218.122(a), because the affected loading stations are equipped with submerged loading pipes.

7.6.5 Control Requirements

None

7.6.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected loading stations are subject to the following:

Emissions from the specified loading station shall not exceed the following limits:

Station	Pollutant	Throughput (Gal/Year)	VOM Emissions (lb/hr)	VOM Emissions (Ton/Year)
40	Methylene Chloride	250,000	0.22	0.86
40	Tetrahydrofuran	280,000	0.20	0.73
40	1,1,1-Trichloroethane	250,000	0.10	0.37
40	Trichloroethane	100,000	0.02	0.09
40	Perchloroethylene	250,000	0.01	0.06

The above limitations were established in Permit 92120055, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned Construction 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].

7.6.7 Operating Requirements

None

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected loading station to demonstrate compliance with Conditions 5.5.1 and 7.6.6, pursuant to Section 39.5(7)(b) of the Act:

a. Material throughput of the affected loading stations in gal/month and gal/yr.

b. Emission of VOM and HAP in lb/month and T/yr.

c. Physical data of the chemicals transferred through the affected loading stations (i.e. vapor pressure, molecular weight, temperature).

d. Separate emissions of VOM (ton/mo and ton/yr) FOR LOADING RACKS 27, 31, 35 and 40.

e. Separate emissions of VOM (ton/mo and ton/yr) for loading racks 34 and 36.

f. Separate emissions of VOM (ton/mo and ton/yr) for loading racks 4-6, 11, 13, 18, 22-26, 28 and 29.

7.6.10 Reporting Requirements

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

a. The Permittee shall submit to the Illinois EPA as a minimum, annual reports detailing the nature, specific emissions and total annual quantities of all specified air contaminant emissions; provided, however, that the Illinois EPA may require more frequent reports where necessary to accomplish the purposes of the Act and 35 IAC 201 Subpart K.

b. Any record showing violation of the VOM limits as defined in Condition 7.6.6 and Condition 5.5.3 shall be reported by sending a copy of such record to the Illinois EPA within thirty (30) days following the occurrence of the violation.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

In addition to the products listed in 7.6.6, the Permittee may load or unload any liquid inorganic or non-HAP hydrocarbon product.

7.6.12 Compliance Procedures

Compliance with Conditions 5.5.1 and 7.6.6 shall be based on the recordkeeping requirements in Condition 7.6.9 and the emission factors and formula listed below:

Loading Loss: $L_L = 12.46*S*P*M/T$

where:

L_L: #/1000 Gal
S: Sol. Factor
P: Vapor Pressure
M: Molecular Weight
T: Temperature
TH: Annual Throughput

The above equation can be found in AP-42, 5th edition, Section 5.2.2.1.1.

lb/yr = LL*TH
TPY = lb/yr*1 ton/2000 lb
lb/hr = lb/yr* 1 yr/8,760 hr
Max TH: Max annual throughput = TH*2

7.7 Unit 07 - Antifreeze Packaging Lines
Control 07 - None

7.7.1 Description

Ethylene glycol and additives are mixed and fed into six (6) blending kettles to produce antifreeze. Antifreeze is transferred to three different filling lines which included two (2) 55 gallon drum filling lines and a one (1) gallon bottle filling line.

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Antifreeze Packaging Lines	Six (6) blending kettles, two (2) 55 gallons drum filling lines, and a one (1) gallon bottle filling line.	None

7.7.3 Applicability Provisions and Applicable Regulations

a. An “affected packaging line” for the purpose of these unit-specific conditions, is an antifreeze filling line with six (6) blending kettles, two (2) 55 gallons drum filling lines and a one (1) gallon bottle filling line as listed in Condition 7.7.2.

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

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 303, and 304 and the following exception: If no odor nuisance exists the limitation of 35 IAC 218, Subpart G shall apply only to photochemically reactive material [35 IAC 218.301].

7.7.4 Non-Applicability of Regulations of Concern

An affected packaging line is not subject to 35 IAC 218, Subpart RR for Miscellaneous Organic Chemical Manufacturing Processes, pursuant to 35 IAC 218.960(d).

7.7.5 Control Requirements

None

7.7.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected packaging line is subject to the following:

Emissions from the affected packaging line shall not exceed the following limits:

VOM Emissions	
(Ton/month)	(Ton/Year)
0.44	0.44

The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the VOM emissions from the affected filling line below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

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) [T1N].

7.7.7 Operating Requirements

None

7.7.8 Inspection Requirements

None

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for an affected packaging line to demonstrate compliance with Conditions 5.5.1 and 7.7 .6, pursuant to Section 39.5(7)(b) of the Act:

a. The throughput of the affected packaging line in gal/mo and gal/yr.

b. The annual emissions from the affected packaging line based on the material stored, the drums throughput, and the applicable emission factors and formulas with supporting calculations.

7.7.10 Reporting Requirements

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

a. The Permittee of any emission unit or air pollution control equipment, unless specifically exempted in this Section, shall submit to the Illinois EPA as a minimum, annual reports detailing the nature, specific emission units and total annual quantities of all specified air contaminant emissions; provided, however, that the Illinois EPA may require more frequent reports where necessary to accomplish the purposes of the Act and 35 IAC 201 [35 IAC 201.302].

b. Any record showing violation of the VOM limits as defined in Condition 7.7.6 shall be reported by sending a copy of such record to the Illinois EPA within thirty (30) days following the occurrence of the violation.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee may package any liquid inorganic or organic product in the affected packaging line provided the emission limits in 7.7.6 are not exceeded.

7.7.12 Compliance Procedures

a. Compliance with Condition 7.7.3(b) is achieved by the normal work practices and maintenance activities inherent in operation of an affected packaging line.

b. Compliance with Conditions 7.7.6 and 5.5.1 shall be based on the recordkeeping requirement in Conditions 7.7.9 and method listed below:
For the purpose of estimating the VOM emissions from two (2) 55 gallons drum filling lines and a one (1) gallon bottle filling line, the emission factors and equations from AP-42, Section 4.3 should be used and listed below:

The emission calculation consists of two parts, a breathing loss and a working loss.

The breathing loss is calculated by:

$$Lb = 2.26x10^{-2} * Mv * (P/(Pa-P))^{0.68} * D^{1.73} * H^{0.51} * dT^{0.5} * Fp * C * Kc$$

where:

Mv = molecular weight of vapor in storage tank, lb/lb-mole

Pa = average atmospheric pressure, psia

P = true vapor pressure at bulk liquid conditions, psia

D = tank diameter, ft

H = average vapor space height, ft, default is one-half of tank height

dT = average ambient diurnal temperature change, ^{o}F, default is 20 ^{o}F

Fp = paint factor, dimensionless

C = adjustment factor for small diameter tanks, dimensionless

Kc = product factor, dimensionless

Lb = fixed roof breathing loss, lb/yr

The working loss is calculated by:

$$Lw = 2.40 \times 10^{-5} * Mv * P * V * N * Kn * Kc$$

where:

Mv = molecular weight of vapor in storage tank, lb/lb-mole

P = true vapor pressure at bulk liquid conditions, psia

V = tank capacity, gal

N = number of turnovers per year, dimensionless

Kn = turnover factor, dimensionless

Kc = product factor, dimensionless

Lw = fixed roof working loss, lb/yr

The TOTAL losses are calculated by:

$$Lt = Lb + Lw, \text{ lb/yr}$$

For the purpose of estimating the VOM emissions from the six (6) kettles, the current version of the TANKS program is acceptable.

7.8 Unit 08 - HDPE Line
Control 08 - Filter Unit System

7.8.1 Description

HDPE line is a plastic bottles manufacturing line. HDPE and blue concentrate are mixed and injected into the blow molding machines to form plastic bottles. The particulate emissions from the HDPE line pass through three (3) separate filter units before being emitted into the atmosphere.

7.8.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
HDPE Line	Production of plastic bottles.	Three (3) Filter Units

7.8.3 Applicability Provisions and Applicable Regulations

a. The “affected manufacturing line” for the purpose of these unit-specific conditions, is a plastic bottles manufacturing line that involves mixing and a blow molding process. The affected manufacturing line also includes three (3) separate filter units that control the PM emissions from the mixing and molding process.

b. The affected manufacturing line is subject to the emission limits identified in Conditions 5.2.2.

c. The affected manufacturing line is subject to 35 IAC 212.321, which provides that:

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process unit for 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 below [35 IAC 212.321(a)].

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

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

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	lbs/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	lbs/hr
A	11.42	24.8
B	0.16	0.16

[35 IAC 212.321(b)].

iii. Limits for Process Emission Units For Which Construction of Modification Commenced On or After April 14,1972

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	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	2.10	3.00	4.60
3.6	2.40	4.00	5.35
4.5	2.70	5.00	6.00
9.0	3.90	10.00	8.70
13.0	4.80	15.00	10.80
18.0	5.70	20.00	12.50
23.0	6.50	25.00	14.00
27.0	7.10	30.00	15.60
32.0	7.70	35.00	17.00
36.0	8.20	40.00	18.20
41.0	8.80	45.00	19.20
45.0	9.30	50.00	20.50
90.0	13.40	100.00	29.50
140.0	17.00	150.00	37.00
180.0	19.40	200.00	43.00
230.0	22.00	250.00	48.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
270.0	24.00	300.00	53.00
320.0	26.00	350.00	58.00
360.0	28.00	400.00	62.00
408.0	30.10	450.00	66.00
454.0	30.40	500.00	67.00

where:

P = Process weight rate in metric or T/hr,

E = Allowable emission rate in kg/hr or lbs/hr [35 IAC 212.321(c)].

7.8.4 Non-Applicability of Regulations of Concern

None

7.8.5 Control Requirements

None

7.8.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected manufacturing line is subject to the following:

Emissions from the affected manufacturing line shall not exceed the following limits:

Particulate Matter Emissions	
lbs/hr	T/yr
4.69	20.49

The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the VOM emissions from the affected filling line below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

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) [T1N].

7.8.7 Operating Requirements

None

7.8.8 Inspection Requirements

The Permittee shall inspect, maintain, and replace the filters in a manner that assures compliance with the conditions of this section.

7.8.9 Recordkeeping Requirements

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

Polyethylene throughput in lb/day and T/month.

7.8.10 Reporting Requirements

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

The Permittee of the filter unit system shall submit to the Illinois EPA as a minimum, annual reports detailing the nature, specific emission units and total annual quantities of all specified air contaminant emissions; provided, however, that the Illinois EPA may require more frequent reports where necessary to accomplish the purposes of the Act and this Chapter [35 IAC 201.302(a)].

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.8.12 Compliance Procedures

a. Compliance provisions addressing Condition 7.8.3(b) is achieved by the normal work practices and maintenance activities inherent in operation of the affected manufacturing line.

b. Compliance with Condition 7.8.3(c) shall based on the recordkeeping requirement by Condition 7.8.9.

c. Compliance with the Conditions 7.8.6 and 5.5.1 shall be based on the recordkeeping requirements in Condition 7.8.9, and emission factors, methods and procedures provided in AP-42 fifth edition, January 1995 and efficiency of the control device as noted in the equation below.

Part(ton)= [(3 Lb/ton)*(throughput (ton/day))*(1-control eff.(%))*(1-capture eff.(%))]/2000 Lb/ton

7.9 Unit 09 - Boilers #1 & 2
Control 09 - None

7.9.1 Description

Two (2) boilers with a firing rate of 13.4 mmBtu/hr are utilized to produce process steam.

7.9.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Boilers #1 & 2	Supply process steam.	None

7.9.3 Applicability Provisions and Applicable Regulations

a. The “affected boilers” for the purpose of these unit-specific conditions, are two (2) 13.4 mmBtu/hr natural gas fired boilers.

b. No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.9.4 Non-Applicability of Regulations of Concern

a. The “affected boilers” are not subject to 35 IAC 218.301 because of the exemption in 35 IAC 218.303.

b. The “affected boilers” are not subject to the New Source Performance Standards (NSPS) Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units because the affected boilers were constructed prior to June 9, 1989.

7.9.5 Control Requirements

None

7.9.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected boilers are subject to the following:

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

7.9.7 Operating Requirements

None

7.9.8 Inspection Requirements

The Permittee shall inspect the affected boilers on a regular basis to ensure compliance with the conditions of this section.

7.9.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with Conditions 5.5.1 and 7.9.3, pursuant to Section 39.5(7)(b) of the Act:

Total natural gas usage for affected boilers (ft^3/month).

7.9.10 Reporting Requirements

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

The Permittee of the affected boilers shall submit to the Illinois EPA as a minimum, annual reports detailing the nature, specific emission units and total annual quantities of all specified air contaminant emissions; provided, however, that the Illinois EPA may require more frequent reports where necessary to accomplish the purposes of the Act and this Chapter [35 IAC 201.302(a)].

7.9.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.9.12 Compliance Procedures

a. Compliance with the emission limits in Condition 5.5.1 shall be based on the recordkeeping requirements in Condition 7.9.9 and the emission factors and formulas listed below:

   Emissions from the boilers burning natural gas shall be calculated based on the following emission factors:

Pollutant	Emission Factor ($lb/10^6 ft^3$)
PM	7.6
SO_2	0.6
VOM	5.5
NO_x	100.0

These are emission factors for uncontrolled natural gas combustion in small industrial boilers (10 - <100 mmBtu/hr), Tables 1.4-1, 1.4-2, and AP-42, Volume I, 5th Edition, March 1998 Revision.

Boiler Emissions (ton) = ((natural gas consumed(ft^3/mo) x (appropriate emission factor($Lb/10^6 ft^3$))/2000 Lb/ton

b. Compliance with Condition 7.9.3(b) is assumed to be achieved by work-practices inherent in operation of the affected boilers, so that no compliance procedures are set in this permit addressing this regulation.

7.10 Unit 10 - Fugitive Emissions
Control 10 - Spraying of Calcium Chloride

7.10.1 Description

The facility has 2.75 miles of paved and unpaved roads where tank truck travel occurs which generates particulate matter. VOM emissions are also caused by leakage from pumps, valves and flanges throughout the facility.

7.10.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
2.97 Miles of Paved Roadways, 0.69 Miles of Unpaved Roadways	PM emissions caused by the roadways.	Paved Roadways: Spraying with Water Unpaved Roadways: Spraying with Calcium Chloride
Pumps, Valves, Flanges, etc.	VOM emissions caused by equipment leaks.	None

7.10.3 Applicability Provisions and Applicable Regulations

a. An “affected fugitive emission source” for the purpose of these unit-specific conditions are all the VOM emissions caused by equipment leaks and all particulate emissions caused by the movement of traffic across roadways and parking areas.

b. An affected fugitive emission source is subject to the emission limit identified in Condition 5.2.2.

c. An affected fugitive emission source is subject to 35 IAC 212.316(c), which provides that:

No person shall cause or allow fugitive particulate matter emissions from any roadway or parking area to exceed an opacity of 10 percent [35 IAC 212.316(c)].

7.10.4 Non-Applicability of Regulations of Concern

None

7.10.5 Control Requirements and Work Practices

a. An affected fugitive emission source is subject to the control requirements and work practices identified in the operating program required in Condition 7.10.7(a).

b. Conditions 5.2.2(a) [35 IAC 212.301] shall not apply and spraying required by the operating program of Condition 5.2.2(b) [35 IAC 212.309 and 212.312] shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purpose of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U. S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements [35 IAC 212.314].

7.10.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, an affected fugitive emission source is subject to the following:

Emissions from the affected fugitive emission source shall not exceed the following limits:

Pollutant	(Ton/month)	(Ton/Year)
PM	6	75.6
VOM	1.377	13.77

The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the PM & VOM emissions from the affected fugitive emission source below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

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) [T1N].

7.10.7 Operating Requirements and Testing Requirements

a. i. An affected fugitive emission source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].

ii. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

iii. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

b. Measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged. This test method shall be used to determine compliance with Condition 7.10.3 and Condition 5.2.2(a) [35 IAC 212.109].

7.10.8 Inspection Requirements and Monitoring Requirements

The Permittee shall perform visual observations, in accordance with Condition 7.10.7(b), once a quarter on the access road, front gate, main parking lot, and other principle roadways and parking areas.

7.10.9 Recordkeeping Requirements

a. In addition to the records required by Condition 5.6 for annual emissions from an affected fugitive emission source pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep written records of the application of control measures as may be needed for compliance with the opacity limitation of Condition 7.10.3(b)(2) [35 IAC 212.316(g)]:

i. A map or diagram showing the location, identification, length, and width of roadways;

ii. For each application of chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical;

iii. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent and, if diluted, percent of concentration, used each day; and

iv. A log recording incidents when control measures were not used and a statement of explanation.

v. A log of all exceedances and the corrective actions taken to remedy the situation.

b. Copies of all written records required by this condition shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA and shall be transmitted to the Illinois EPA by a company-designated person with authority to release such records.

c. The records required by this condition shall be kept and maintained for at least five (5) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

d. A log of the vehicle miles traveled per year.

7.10.10 Reporting Requirements

Pursuant to 35 IAC 212.316(g), the Permittee shall perform the following reporting:

a. i. A quarterly report shall be submitted to the Illinois EPA stating the following:

A. The dates any necessary control measures were not implemented;

B. A listing of those control measures;

C. The reasons that the control measures were not implemented; and

D. Any corrective actions taken.

ii. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall be a defense to the requirements of this condition.

iii. This report shall be submitted to the Illinois EPA thirty (30) calendar days from the end of a quarter.

iv. Quarters end March 31, June 30, September 30, and December 31 [35 IAC 212.316(g)(5)].

b. A summary of the information required by the records of Condition 7.10.9(a) shall be submitted in an annual report, e.g., the annual emissions report required by Condition 9.7 [35 IAC 212.316(g)(1)].

7.10.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.10.12 Compliance Procedures

a. Compliance with Condition 7.10.3(b) will be demonstrated under the work practices of Condition 7.10.5, operating requirements of 7.10.7, monitoring requirements of Condition 7.10.8, and the recordkeeping requirements of 7.10.9.

b. Compliance with the Conditions 7.10.6 and 5.5.1 shall be determined by using the emission factors and formula listed below:

For paved road,

$$E = k\{sL/12\}^{0.3}$$

$$TPY = (N1*N2)*E*1 \text{ ton}/907.18 \text{ Kg}$$

where:

E = emission factor, Kg/VKT (VKT = vehicle kilometer traveled)

sL = road surface slit loading (grams per square meter) (g/m^2)

k = particle size multiplier (AP-42,p.11.2.6-3)

This is the formula from AP-42, 5th edition, used to develop an emission factor for the fugitive particulate matter emissions from paved roads.

For unpaved road,

$$E_{ext} = k(5.9)(s/12)(S/30)(W/3)^{0.7}(W/4)^{0.5}(365-P/365)$$

$$TPY = (N1*N2)*E*1\ ton/907.18\ Kg$$

where:

W = mean vehicle weight (tons)
S = 8.9
K = 0.36 assume <10 micron
W = wheels per vehicle
S = Wind Speed

This is the formula from AP-42, 5th edition, Section 13.2.2 - 5 used to develop an emission factor for the fugitive particulate matter emissions from unpaved roads.

In addition, the calculation of VOM emission shall be determined by the emission factors obtained from EPA-450/3-82-010 “Fugitive Emission Sources of Organic Compounds – Additional Information on Emissions, Emission Reductions, and Costs”, U.S.EPA, April, 1982.

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 March 6, 2000 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change, and 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 [Section 39.5(12)(a) of the Act]. This notice shall:

a. Describe the physical or operational change;

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

c. 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;

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

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

8.5 Testing Procedures

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

8.6 Reporting Requirements

8.6.1 Monitoring Reports

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

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 determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

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

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

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

8.6.3 Test Reports

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

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

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

c. The date any analyses were performed;

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

e. The test and analytical methodologies used;

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

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

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

8.6.4 Reporting Addresses

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

i. Illinois EPA - Air Compliance Section

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

ii. Illinois EPA - Air Regional Field Office

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

iii. Illinois EPA - Air Permit Section (MC 11)

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

iv. USEPA Region 5 - Air Branch

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

b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to

the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

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

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

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

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

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or 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, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(p)(ii) of the Act]:

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

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

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

equipment), practices, or operations regulated or required under this permit;

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

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

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

e. Obtain and remove samples of any discharge or emission of pollutants; and

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

9.4 Obligation to Comply With Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit 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 Section, 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 [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for 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:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;

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

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

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

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

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated 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 inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

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

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

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

9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 Attachment 1 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: _____

MJK:psj