

217/782-2113

"RENEWAL"  
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

NuStar Terminal Services, Inc.  
Attn: Robert Latz  
3210 West 131st Street  
Blue Island, Illinois 60406

I.D. No.: 031024ACJ  
Application No.: 95120027

Date Received: April 28, 2004  
Date Issued: February 24, 2011  
Expiration Date<sup>1</sup>: February 24, 2016

Operation of: Bulk Terminal  
Source Location: 3210 West 131st Street, Blue Island, Cook County, 60406  
Responsible Official: Gerald R Koegeboehn, VP/General Manager-CE Region

This permit is hereby granted to the above-designated Permittee to OPERATE a bulk 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 Ross Cooper at 217/782-2113.

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

ECB:RWC:psj

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

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

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1.0 INTRODUCTION

1.1 Source Identification

NuStar Terminal Services, Inc.  
3210 West 131st Street  
Blue Island, Illinois 60406  
Environmental Contact: Suzie McMillan 316/721-7029

I.D. No.: 031024ACJ  
County: Cook  
Standard Industrial Classification: 5171, Petroleum Bulk Stations and  
Terminals

1.2 Owner/Parent Company

NuStar Terminal Services, Inc.  
2330 North Loop 1604 West  
San Antonio, Texas 78248

1.3 Operator

NuStar Terminal Services, Inc.  
3210 West 131st Street  
Blue Island, Illinois 60406  
  
Suzie McMillan, HSE Coordinator  
316/721-7029

1.4 Source Description

The source is a bulk terminal for various products. Materials are transferred to the terminal by pipeline where they may be temporarily stored at the source prior to shipment of the material to different destinations via the pipeline, or distributed to petroleum bulk plants or gasoline dispensing operations located within the surrounding community by way of truck. A truck loading rack is used for this purpose. Certain materials are also transferred by way of barges through a barge loading station.

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

1.5 Title I Conditions

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

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

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

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MSSCAM	Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

### 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

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

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

One API Oil/Water Separator  
Gasoline Additive Storage Tanks #21(10,575 gal) and #22(5,265 gal)

- 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)].

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

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

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

### 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 218.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.
- 3.2.4 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 218.182.
- 3.2.5 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70 °F, the Permittee shall comply with the applicable requirements of 35 IAC 218.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.

### 3.3 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
Tank 1501	Fixed Roof Tank (630,000 gallons)	1948	Permanent Submerged Loading Pipe
Tank 2701	Fixed Roof Tank (1,115,000 gallons)	1951	Permanent Submerged Loading Pipe
5502	Internal Floating Roof Tank (2,310,000 gallons)	1949	Permanent Submerged Loading Pipe and Internal Floating Roof
5503	Internal Floating Roof Tank (2,310,000 gallons)	1950	Permanent Submerged Loading Pipe and Internal Floating Roof
2502	Internal Floating Roof Tank (1,050,000 gallons)	1951	Permanent Submerged Loading Pipe and Internal Floating Roof
5504	Internal Floating Roof Tank (2,310,000 gallons)	1953	Permanent Submerged Loading Pipe and Internal Floating Roof
5505	Internal Floating Roof Tank (2,310,000 gallons)	1954	Permanent Submerged Loading Pipe and Internal Floating Roof
5506	Internal Floating Roof Tank (2,310,000 gallons)	1954	Permanent Submerged Loading Pipe and Internal Floating Roof
13001	Internal Floating Roof Tank (5,460,000 gallons)	1956	Permanent Submerged Loading Pipe and Internal Floating Roof
13002	Internal Floating Roof Tank (5,460,000 gallons)	1956	Permanent Submerged Loading Pipe and Internal Floating Roof

5501	Variable Vapor Space Storage Tank <sup>1</sup> (2,310,000 gallons)	1946	Permanent Submerged Loading Pipe and Lifter Roof
2001	Fixed Roof Storage Tank (840,000 gallons)	1946	Permanent Submerged Loading Pipe and Venting Of Vapors To Tank 5501
Tank 2002	Internal Floating Roof Tank (420,000 gallons)	04/13/2007	Permanent Submerged Loading Pipe and Internal Floating Roof
Tank 2501*	Internal Floating Roof Tank (1,050,000 gallons)	04/13/2007	Permanent Submerged Loading Pipe and Internal Floating Roof
Truck Loading Rack	Three Bay Loading Rack Used for Loading Various Petroleum Products into Tank Trucks	1950	Vapor Collection System and Flare
Railroad Tank Car Loading Rack	Four Bay Loading Rack Used for Loading Fuel Ethanol and VOL into Railroad Tank Cars	11/03/05 modified: 04/13/07	Vapor Collection System and Flare
Barge Loading Station	Ethanol and Fuel Oil Loading	Prior to 1973	None

1           Equivalent to an internal floating roof

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Applicability of Clean Air Act Permit Program (CAAPP)

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

### 5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated nonattainment for the National Ambient Air Quality Standards for ozone (moderate nonattainment) and/or PM<sub>2.5</sub> and attainment or unclassifiable for all other criteria pollutants (ozone, PM<sub>2.5</sub>).

### 5.3 Source-Wide Applicable Provisions and Regulations

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

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

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

#### 5.3.3 Ozone Depleting Substances

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

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

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

#### 5.3.4 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit the items below. This condition is imposed in this permit pursuant to 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 RMP, as part of the annual compliance certification required by Condition 9.8.

#### 5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
  - i. A. The source will be subject to the area source NESHAP 40 CFR 63 Subpart BBBBBB for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities as an A bulk gasoline terminal, pursuant to 40 CFR 63.11081.
  - B. I. As of the date of issuance of this permit, the source will be considered an existing affected source pursuant to 40 CFR 63.11082(d).
  - II. An existing affected source must comply with the standards in 40 CFR 63 Subpart BBBBBB no later than January 10, 2011, pursuant to 40 CFR 63.11083(b).
  - III. An affected source will be considered reconstructed if the affected source meets the criteria for reconstruction as

defined in 40 CFR 63.2, pursuant to 40 CFR 63.11082(c).

- C. I. Gasoline storage tanks at a bulk gasoline terminal must meet the requirements at 40 CFR 63.11087.
- II. Gasoline loading racks at a bulk gasoline terminal must meet the requirements at 40 CFR 63.11088.
- III. Equipment leak inspection at a bulk gasoline terminal must meet the requirements at 40 CFR 63.11089.
- IV. Testing and monitoring at a bulk gasoline terminal must meet the requirements at 40 CFR 63.11092.
- V. Notifications, records, and reports at a bulk gasoline terminal must respectively meet the requirements at 40 CFR 63.11093, 40 CFR 63.11094, and 40 CFR 63.11095.
- VI. General Provisions at a bulk gasoline terminal must meet the requirements at 40 CFR 63.11098.

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

#### 5.3.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144 and is incorporated by reference into this permit.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.

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

#### 5.3.7 Gasoline Volatility Standards

Pursuant to 35 IAC 218.585:

- a. No person shall sell, offer for sale, dispense, supply, offer for supply, or transport for use in Illinois gasoline whose Reid vapor pressure exceeds the applicable limitations set forth in subsections (b) and (c) during the regulatory control periods, which shall be May 1 to September 15 for retail outlets, wholesale purchaser-consumer, operations, and all other operations.
- b. The Reid vapor pressure of gasoline, a measure of its volatility, shall not exceed 9.0 psi (62.07 kPa) during the regulatory control period in 1990 and each year thereafter.
- c. The Reid vapor pressure of ethanol blend gasolines shall not exceed the limitations for gasoline set forth in subsection (b) by more than 1.0 psi (6.9 kPa). Notwithstanding this limitation, blenders of ethanol blend gasolines whose Reid vapor pressure is less than 1.0 psi above the base stock gasoline immediately after blending with ethanol are prohibited from adding butane or any product that will increase the Reid vapor pressure of the blended gasoline.
- d. All sampling of gasoline required pursuant to these provisions shall be conducted by one or more of the following approved methods or procedures which are incorporated by reference in Section 215.105.
  - i. For manual sampling, ASTM D4057;
  - ii. For automatic sampling, ASTM D4177;
  - iii. Sampling procedures for Fuel Volatility, 40 CFR 80 Appendix D.
- e. The Reid vapor pressure of gasoline shall be measured in accordance with either test method ASTM D323 or a modification of ASTM D323 known as the "dry method" as set forth in 40 CFR 80, Appendix E, incorporated by reference in 35 IAC 218.112. For gasoline - oxygenate blends which

contain water-extractable oxygenates, the Reid vapor pressure shall be measured using the dry method test.

- f. The ethanol content of ethanol blend gasolines shall be determined by use of one of the approved testing methodologies specified in 40 CFR 80, Appendix F, incorporated by reference in 35 IAC 218.112.
- g. Any alternate to the sampling or testing methods or procedures contained in subsections (d), (e), and (f) must be approved by the Agency, which shall consider data comparing the performance of the proposed alternative to the performance of one or more approved test methods or procedures. Such data shall accompany any request for Agency approval of any alternate test procedure. If the Agency determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test methods or procedures, the Agency shall approve the proposed alternative.
- h. Each refiner or supplier that distributes gasoline or ethanol blends shall:
  - i. During the regulatory control period, state that the Reid vapor pressure of all gasoline or ethanol blends leaving the refinery or distribution operation for use in Illinois complies with the Reid vapor pressure limitations set forth in 35 IAC 218.585(b) and (c). Any operation receiving this gasoline shall be provided with a copy of an invoice, bill of lading, or other documentation used in normal business practice stating that the Reid vapor pressure of the gasoline complies with the State Reid vapor pressure standard.
  - ii. Maintain records for a period of one year on the Reid vapor pressure, quantity shipped and date of delivery of any gasoline or ethanol blends leaving the refinery or distribution operation for use in Illinois. The Agency shall be provided with copies of such records if requested.

#### 5.3.8 Leak Monitoring Program (LMP)

- a. Pursuant to 35 IAC 218.142, no person shall cause or allow the discharge of more than 32.8 ml (2 cu in) of VOL with vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions.
- b. The source owner or operator shall develop and maintain a leak monitoring program (LMP).

- c. The source owner or operator shall immediately implement the appropriate steps described in the LMP.
- d. The LMP should be reviewed and adjusted as needed on at least an annual basis. Additionally, changes in source operation and management; additions or modifications of to the source; changes in ownership of surrounding property; or changes in local, state, or federal regulations may all be reasons for review and adjustment to the LMP.
- e. The LMP, at a minimum, shall contain:
  - i. An identification of all leaking components and the period in which each will be monitored.
  - ii. A description of the monitoring method to be used when complying with Section 218.142.
  - iii. An leak monitoring protocol consistent with Condition 5.3.8(f).
  - iv. Inspection and maintenance in accordance with manufactures written instructions for the potential leak sources.
- f. Leak Monitoring Protocol:
  - i. Leak monitoring inspections shall be performed at least quarterly in accordance with the monitoring protocol specified in the LMP.
  - ii. Monitoring methods may include standard industry practice, visual observation, smell, USEPA Method 21, etc.
  - iii. A leak detected more than 50% of the applicable standard of 35 IAC 218.142 shall be repaired and retested as soon as practicable, but no later than 15 days after the leak is found unless the leaking component cannot be repaired until the process unit is shut down. If a shutdown is required, the leaking pump or compressor shall be repaired to taken out of service immediately.
  - iv. If repair of a leaking component is necessary, a recheck post repair shall be performed.
  - v. The source owner or operator shall also conduct leak monitoring upon written request by the Illinois EPA.

g. Recordkeeping for Leaks

The owner or operator shall maintain a leaking component monitoring log which shall contain, at a minimum, the following information:

- i. The name of the process unit where the component is located.
- ii. The date on which a leak monitoring inspections is carried out.
- iii. Inspection results denoting the presence or absence of a leak, with description, and the means of identification.
- iv. The date on which a leaking component is discovered.
- v. The date on which a leaking component is repaired.
- vi. The date of the recheck procedure after a leaking component is repaired.
- vii. Identification of a leaking component which cannot be repaired until process unit shutdown.
- viii. The date on which a leaking component which could not be repaired was taken out of service.

- h. The owner or operator shall submit quarterly reports to the Agency on or before March 31, June 30, September 30, and December 31 of each year, listing all leaking components which could not be repaired within 15 days. No report is necessary for periods in which no repair is required, or repair within the 15 days is sufficient.

5.4 Source-Wide Non-Applicability of Regulations of Concern

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

5.5 Source-Wide Control Requirements and Work Practices

Source-wide control requirements and work practices are not set for this source.

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	98
Sulfur Dioxide (SO <sub>2</sub> )	0
Particulate Matter (PM)	4.95
Nitrogen Oxides (NO <sub>x</sub> )	4.2
HAP, not included in VOM or PM	---
Total	107.15

5.6.2 Emissions of Hazardous Air Pollutants

Pursuant to Section 39.5(7)(a) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). This condition is being imposed so that the source is not a major source of HAP emissions. The Permittee shall fulfill the applicable testing, recordkeeping, and reporting requirements of Conditions 5.7.2, 5.9.2, and 5.10.2.

5.6.3 Other Source-Wide Production and Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to the federal rules for PSD, state rules for MSSCAM, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.7 Source-Wide Testing Requirements

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

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the

emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].

- b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].
- c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

#### 5.8 Source-Wide Monitoring Requirements

Source-wide monitoring requirements are not set for this source.

#### 5.9 Source-Wide Recordkeeping Requirements

##### 5.9.1 Annual Emission Records

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

##### 5.9.2 Records for HAP Emissions

- a. The Permittee shall maintain records of individual and combined HAP emissions on a monthly and annual basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.2, pursuant to Section 39.5(7)(b) of the Act.
- b. If testing is required by Condition 5.7.2, the Permittee shall keep records of the testing, including the test date, conditions, methodologies, calculations, test results, and any discrepancies between the test results and formulation specifications of Condition 5.9.2(c) below.
- c. The Permittee shall keep an MSDS or equivalent document showing the formulation of each material, including content of all HAPs. These formulation sheets may be used to make the calculation of HAP emissions required by Condition

5.7.2. If the formulation sheet uses a maximum or range value (e.g., less than 1% or range of 2 - 3%) then the highest value shall be used.

#### 5.9.3 Retention and Availability of Records

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

#### 5.10 Source-Wide Reporting Requirements

##### 5.10.1 General Source-Wide Reporting Requirements

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

##### 5.10.2 Annual Emissions Report

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

#### 5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Pursuant to Section 39.5(7)(1)(i) of the Act, the Permittee is authorized to make the following physical or operational changes without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

- a. The Permittee is authorized to store materials with a vapor pressure less than 0.5 psia at 70°F, e.g., distillate fuel oils or blend stocks, diesel fuel, and jet kerosene, in any storage tank identified in this permit as a VPL storage tank. In such instances, the unit-specific permit conditions in Section 7.0 of

this permit applicable to such tank based on the storage of VPL shall no longer apply. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of an emission unit, as defined in 35 IAC 201.102.

- b. Upon resuming storage of VPL in such a tank, the applicable unit-specific conditions of Section 7.0 of this permit shall again apply to such tank. In addition, prior to returning such a tank to storage of VPL, the Permittee shall conduct applicable inspection of the tank for storage of VPL.

## 5.12 Source-Wide Compliance Procedures

### 5.12.1 Procedures for Calculating Emissions

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

## 5.13 General Compliance Procedures

### 5.13.1 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, Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit, and the use of USEPA approved emissions estimating guidance.

## 6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

### 6.1 Emissions Reduction Market System (ERMS)

#### 6.1.1 Description of ERMS

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

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

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

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

#### 6.1.2 Applicability

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

6.1.3 Obligation to Hold Allotment Trading Units (ATUs)

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

6.1.4 Market Transactions

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

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

#### 6.1.5 Emissions Excursion Compensation

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

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

#### 6.1.6 Quantification of Seasonal VOM Emissions

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

No exceptions

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

#### 6.1.7 Annual Account Reporting

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

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

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

6.1.8 Allotment of ATUs to the Source

- a.
  - i. The allotment of ATUs to this source is 376 ATUs per seasonal allotment period.
  - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 42.664 tons per season.
    - A. This determination includes use of the 1992 and 1993 seasons as substitutes for the 1994-1996 seasons due to non-representative conditions in these seasons, as allowed by 35 IAC 205.320(a)(2).
  - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.1.10 of this permit.
  - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.
- b. Contingent Allotments for New or Modified Emission Units  
None
- c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 IAC Part 205, including:
  - i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;
  - ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 IAC 205.720; and
  - iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

6.1.9 Recordkeeping for ERMS

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

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

6.1.10 Exclusions from Further Reductions

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

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

None

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

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because

these emission units use BAT for controlling VOM emissions  
as indicated above [35 IAC 205.405(b) and (c)]:

None

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Existing Fixed Roof Storage Tanks

7.1.1 Description

The Permittee operates a variety of fixed roof storage tanks which store volatile organic liquids with a vapor pressure of less than 0.75 psia. Permanent submerged loading pipes are used on all of these tanks to minimize turbulence and evaporation of VOM during loading.

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

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Tank 1501	Fixed Roof Tank (630,000 gallons)	1948	Permanent Submerged Loading Pipe
Tank 2701	Fixed Roof Tank (1,115,000 gallons)	1951	Permanent Submerged Loading Pipe

7.1.3 Applicable Provisions and Regulations

- a. The "affected storage tanks" for the purpose of these unit-specific conditions, are storage tanks described in Conditions 7.1.1 and 7.1.2.

Note: Control requirements and work practices for these emission units are established in 7.1.5.

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected storage tanks are not subject to the New Source Performance Standards (NSPS) for Standards of Performance for Volatile Organic Liquid Storage Vessels, 40 CFR Part 60, Subpart K, Ka or Kb, because the affected storage tanks were each constructed prior to the applicability dates of these regulations.

Note: To qualify for this non-applicability, the Permittee has certified that the affected storage tanks have not been modified or reconstructed after July 23, 1984.

- b. i. A. The affected storage tanks are not subject to the control requirements of 35 IAC 218.120, because the affected storage tanks do not store VOL with a maximum true vapor pressure equal to

0.75 psia or greater, pursuant to 35 IAC 218.120(a).

- B. The affected storage tanks are not subject to 35 IAC 218.121, because the affected storage tanks do not store volatile petroleum liquid (VPL) as defined by 35 IAC 211.7170.
  - C. The affected storage tanks are not subject to 35 IAC 218.123, because the affected storage tanks do not store petroleum liquid as defined by 35 IAC 211.4610.
  - D. The affected storage tanks are not subject to 35 IAC 218.124, because the affected storage tanks are not equipped with external floating roofs.
- ii. The affected storage tanks are not subject to 35 IAC 218.142, because the affected storage tanks do not pump or compress a VOL with vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
  - iii. The affected storage tanks are not subject to 35 IAC 218.301, because the affected storage and loading operations by storage tanks is not considered a "use organic material".
- c. The affected storage tanks are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected storage tanks use a passive control measure, such as a submerged loading, combustion or other process design feature or characteristic, that is not considered a control device because it acts to prevent the pollutants from forming.

#### 7.1.5 Control Requirements and Work Practices

- a. The Permittee shall follow good operating practices for the affected storage tanks, including periodic inspection, routine maintenance and prompt repair of defects.
- b. i. Pursuant to 35 IAC 218.122(b), no person shall 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).

- iii. Exception: If no odor nuisance exists the limitations of Condition 7.1.5(b)(i) shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- c. Volatile organic liquids with a vapor pressure of 0.75 psia or greater shall not be loaded or stored in the affected storage tanks.

7.1.6 Production and Emission Limitations

Production and emission limitations are not set for the affected storage tanks.

7.1.7 Testing Requirements

Testing requirements are not set for the affected storage tanks.

7.1.8 Monitoring Requirements

- a. On an annual basis, in the period between March 1 and April 30 of each year, the Permittee shall conduct an inspection of the affected storage tanks to review the physical condition and ability to comply with the applicable equipment requirements of condition 7.1.5(b), pursuant to sections 39.5(7)(a) and (d) of the Act. Including the below:
  - i. A determination of the presence and functionality of the permanent submerged loading pipe.
  - ii. A determination of the existence of an odor nuisance.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected storage tank to demonstrate compliance with Conditions 5.6.1 and 7.1.5(b), pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the monitoring required by Condition 7.1.8(a) (e.g., the presence and functionality of a submerged loading pipe).
- b. The throughput by material of the affected storage tanks, gal/mo and gal/yr.
- c. Records of the vapor pressure of the volatile organic liquid loaded or stored in the affected storage tanks.
- d. Except as provided in 35 IAC 218.128(c) and (d), the owner or operator of each storage vessel subject to the requirements in Section 218.120 with a design capacity

greater than or equal to 40,000 gallons storing a liquid with a maximum true vapor pressure greater than or equal to 0.5 psia but less than 0.75 psia shall maintain a record of the VOL storage, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period, pursuant to 35 IAC 218.129(g).

- e. Maintenance and repair records for the affected storage tanks, specifically as related to the repair or replacement of the submerged loading pipe.
- f. The annual VOM emissions from the affected storage tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations using the methods in Condition 7.1.12(b).

#### 7.1.10 Reporting Requirements

##### a. Reporting of Deviations

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

- i. Operation of the affected storage tanks in excess of the limits specified in Condition 7.1.5(b)(i) within 30 days of such occurrence.

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected storage tanks.

#### 7.1.12 Compliance Procedures

- a. Compliance with Condition 7.1.5(c) is addressed by the use of a submerged loading pipe as required in Condition 7.1.5(c), the monitoring requirements in Condition 7.1.8(a), the records required in Condition 7.1.9, and the reports required in Condition 7.1.10.
- b. Compliance with Condition 7.1.5(c) is addressed by the records required in Condition 7.1.9, and the reports required in Condition 7.1.10.
- c. Compliance with the VOM emission limitation of Condition 5.6.1 is addressed by the testing required by Condition 7.1.7, the monitoring required by Condition 7.1.8, the records required in Condition 7.1.9, the reports required in Condition 7.1.10, and emission calculations using the emission factor in USEPA's Compilation of Air Pollutant

Emission Factors, AP-42, or the most recent version of the TANKS program is acceptable:

<http://www.epa.gov/ttn/chief/software/tanks/index.html>

7.2 Existing Internal Floating Roof (or Equivalent) Storage Tanks Storing Volatile Organic Liquids (VOL) and/or Volatile Petroleum Liquids (VPL)

7.2.1 Description

The Permittee operates internal floating roof storage tanks to store various VOL and/or VPL products. Permanent submerged loading must be used at these tanks, minimizing turbulence and evaporation of VOM during loading. Tank 2001 is a fixed roof tank, however the tank's vapors vent to Tank 5501 which is a variable vapor space storage tank (equivalent to an internal floating roof storage tank) and therefore have the equivalent of an internal floating roof.

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

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
5502	Internal Floating Roof Tank (2,310,000 gallons)	1949	Permanent Submerged Loading Pipe and Internal Floating Roof
5503	Internal Floating Roof Tank (2,310,000 gallons)	1950	Permanent Submerged Loading Pipe and Internal Floating Roof
2502	Internal Floating Roof Tank (1,050,000 gallons)	1951	Permanent Submerged Loading Pipe and Internal Floating Roof
5504	Internal Floating Roof Tank (2,310,000 gallons)	1953	Permanent Submerged Loading Pipe and Internal Floating Roof
5505	Internal Floating Roof Tank (2,310,000 gallons)	1954	Permanent Submerged Loading Pipe and Internal Floating Roof
5506	Internal Floating Roof Tank (2,310,000 gallons)	1954	Permanent Submerged Loading Pipe and Internal Floating Roof

Emission Unit	Description	Date Constructed	Emission Control Equipment
13001	Internal Floating Roof Tank (5,460,000 gallons)	1956	Permanent Submerged Loading Pipe and Internal Floating Roof
13002	Internal Floating Roof Tank (5,460,000 gallons)	1956	Permanent Submerged Loading Pipe and Internal Floating Roof
5501	Variable Vapor Space Storage Tank <sup>1</sup> (2,310,000 gallons)	1946	Permanent Submerged Loading Pipe and Lifter Roof
2001	Fixed Roof Storage Tank (840,000 gallons)	1946	Permanent Submerged Loading Pipe and Venting Of Vapors To Tank 5501

1 Equivalent to an internal floating roof

#### 7.2.3 Applicable Provisions and Regulations

- a. The "affected storage tanks" for the purpose of these unit-specific conditions, are storage tanks described in Conditions 7.2.1 and 7.2.2.

Note: Control requirements and work practices for these emission units are established in 7.2.5.

#### 7.2.4 Non-Applicability of Regulations of Concern

- a. The affected storage tanks are not subject to the New Source Performance Standards (NSPS) for Standards of Performance for Volatile Organic Liquid Storage Vessels, 40 CFR Part 60, Subpart K, Ka or Kb, because the affected storage tanks were each constructed prior to the applicability dates of these regulations.

Note: To qualify for this non-applicability, the Permittee has certified that the affected storage tanks have not been modified or reconstructed after July 23, 1984.

- b. i. A. The affected storage tanks are not subject to 35 IAC 218.121 or 218.123(b) when handling VOL, because the affected storage tanks under this operating scenario do not store VPL.

- B. The affected storage tanks are not subject to 35 IAC 218.120 when handling VPL, because the affected storage tanks under this operating scenario do not store VOL.
- ii. The affected storage tanks are not subject to 35 IAC 218.124, because the affected storage tanks are not equipped with external floating roofs.
- iii. The affected storage tanks are not subject to 35 IAC 218.301, because the affected storage and loading operations by storage tanks is not considered a "use organic material".
- c. The affected storage tanks are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected storage tanks use a passive control measure, such as a submerged loading, combustion or other process design feature or characteristic, that is not considered a control device because it acts to prevent the pollutants from forming.

7.2.5 Control Requirements and Work Practices

- a. The Permittee shall follow good operating practices for the affected storage tanks, including periodic inspection, routine maintenance and prompt repair of defects.
- b. i. Pursuant to 35 IAC 218.122(b), no person shall 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).
- ii. Exception: If no odor nuisance exists the limitations of shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- c. i. When storing volatile organic liquid (VOL):  
  
Pursuant to 35 IAC 218.120:  
  
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:

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 35 IAC 218.120(a)(4) below:
  - aa. 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.
  - bb. 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.
- cc. 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.
- dd. 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.
- ee. 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.
- ff. 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.

- gg. 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.
  - hh. 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 35 IAC 218.120(a)(1)(A) through (H) above.
3. Each external floating roof tank shall meet the following specifications:
- aa. Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. 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.
    - i. Except as provided in 35 IAC 218.127(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall and shall be either a liquid mounted seal or a shoe seal.
    - ii. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 35 IAC 218.127(b)(4).
    - iii. The tank shall be equipped with the closure device after the next scheduled tank

cleaning, but no later than  
March 15, 2004.

- bb. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that 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 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 leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. 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.
  - cc. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.
4. A closed vent system and control device respectively shall meet the following specifications:
- aa. 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 35 IAC 218.112(d) of this Part.

- bb. 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 35 IAC 218.112(d).

- 5. An alternative emission control plan equivalent to the requirements of 35 IAC 218.120(a)(1), (a)(2), (a)(3), or (a)(4) 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 35 IAC 218.120(a)(4) above.

- C. Notwithstanding subsection (b) of this Section, 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.

- ii. When storing volatile petroleum liquid (VPL):

- A. Pursuant to 35 IAC 218.121, no person shall cause or allow the storage of any volatile petroleum liquid (VPL) with a vapor pressure of 10.34 kPa (1.5 psia) or greater at 294.3°K (70°F) or any gaseous organic material in any stationary tank, reservoir or other container of more than 151 cubic meters (40,000 gal) capacity unless such tank, reservoir or other container:

1. Is a pressure tank capable of withstanding the vapor pressure of such liquid or the pressure of the gas, so as to prevent vapor or gas loss to the atmosphere at all times; or
2. Is designed and equipped with one of the following vapor loss control devices:
  - aa. A floating roof which rests on the surface of the VPL and is equipped with a closure seal or seals between the roof edge and the tank wall. Such floating roof shall not be permitted if the VPL has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3°K (70°F). No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tanks, except during sampling or maintenance operations.
  - bb. A vapor recovery system consisting of:
    - i. A vapor gathering system capable of collecting 85% or more of the uncontrolled VOM that would be otherwise emitted to the atmosphere; and
    - ii. A vapor disposal system capable of processing such VOM so as to prevent its emission to the atmosphere. No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tank, reservoir or other container except during sampling.
3. Other equipment or means of equal efficiency approved by the Agency according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 218.108.

- ii. Pursuant to 35 IAC 218.123(b), no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
  - A. The tank is equipped with one of the vapor loss control devices specified in 35 IAC 218.121(b);
  - B. There are no visible holes, tears or other defects in the seal or any seal fabric or material of any floating roof;
  - C. All openings of any floating roof deck, except stub drains, are equipped with covers, lids or seals such that:
    - 1. The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank;
    - 2. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and
    - 3. Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;
- iii. Routine inspections of floating roof seals are conducted through roof hatches once every six months;
- iv. A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect; and
- v. A record of the results of each inspection conducted under 35 IAC 218.123(b)(4) or (b)(5) is maintained.

#### 7.2.6 Production and Emission Limitations

Production and emission limitations are not set for the affected storage tanks. However, there are source-wide production and emission limitations set forth in Condition 5.6.

#### 7.2.7 Testing Requirements

Pursuant to 35 IAC 218.127, the owner or operator of each storage vessel specified in 35 IAC 218.119 shall comply with the

requirements of 35 IAC 218.127(a), (b), or (c) below. The applicable subsection for a particular storage vessel depends on the control equipment installed to meet the requirements of this Subpart.

a. After installing the control equipment necessary for the source to comply with the requirements of 35 IAC 218.120(a)(1) or (2) (permanently affixed roof and internal floating roof), each owner or operator shall:

i. 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.

ii. 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 this subsection 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 35 IAC 218.129(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 30 days.

iii. For vessels equipped with both primary and secondary seals:

A. Visually inspect the vessel as specified in 35 IAC 18.127(a)(4) below at least every 5 years; or

B. Visually inspect the vessel as specified in 35 IAC 18.127(a)(2) above.

- iv. 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 35 IAC 218.127(a)(2) and (a)(3)(B) above and at intervals no greater than 5 years in the case of vessels specified in 35 IAC 218.127(a)(3)(A) above.
  - v. 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 35 IAC 218.127(a)(1) and (a)(4) above to afford the Agency the opportunity to have an observer present. If the inspection required by subsection (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 external floating roof tanks shall:
- i. Determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel.
    - A. Measurements of gaps between the tank wall the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or

within 60 days after the initial fill with VOL and at least once every 5 years thereafter.

- B. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days after the initial fill with VOL and at least once per year thereafter.
  - C. If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of 35 IAC 218.127(b)(1)(A) and (b)(1)(B) above.
- ii. Determine gap widths and areas in the primary and secondary seals individually according to 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 1/8 inch in diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location; and
  - C. Determine the total surface area of each gap described in 35 IAC 218.127(b)(2)(B) above by using probes of various widths to measure accurately 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 and divide the sum for each by the nominal diameter of the tank and compare each ratio to the respective standards in 35 IAC 218.127(b)(4) below.
- iv. Make necessary repairs or empty the storage vessel within 45 days after identification in any inspection for seals not meeting the requirements listed in 35 IAC 218.127(b)(4)(A) and (B) below:
- A. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 10 in.(2) per foot of tank diameter, and the width of any portion of any gap shall not exceed 1.5 in.

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

- B. The secondary seal is to meet the following requirements:
  - 1. 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 35 IAC 218.127(b)(2)(C) above.
  - 2. 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 1.0 in.(2) per foot of tank diameter, and the width of any portion of any gap shall not exceed 0.5 in. There shall be no gaps between the tank wall and the secondary seal when used in combination with a vapor mounted primary seal.
  - 3. There are to be no holes, tears, or other openings in the seal or seal fabric.
- C. If a failure that is detected during inspections required in 35 IAC 218.127(b)(1) 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 35 IAC 218.129(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
- v. Notify the Agency 30 days in advance of any gap measurements required by 35 IAC 218.127(b)(1) above to afford the Agency the opportunity to have an observer present.
- vi. Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.
  - A. If the external floating roof has defects, if the primary seal has holes, tears, or other

openings in the seal or the seal fabric, or if the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this subsection exist before filling or refilling the storage vessel with VOL.

- B. For all the inspections required by 35 IAC 218.127(b)(6) above, the owner or operator shall notify the Agency in writing at least 30 days prior to filling or refilling of each storage vessel to afford the Agency the opportunity to inspect the storage vessel 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 sent by express mail so that it is received by the Agency at least 7 days prior to the refilling.
- c. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 35 IAC 218.120(a)(4) shall meet the requirements specified in the general control device requirements of 40 CFR 60.18(e) and (f), incorporated by reference at 35 IAC 218.112(d).

#### 7.2.8 Monitoring Requirements

- a. Pursuant to 35 IAC 218.123(b), no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
  - i. Routine inspections of floating roof seals are conducted through roof hatches once every six months, pursuant to 35 IAC 218.123(b)(4).
  - ii. A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect, pursuant to 35 IAC 218.123(b)(5).
- b. Pursuant to 35 IAC 218.128:
  - i. Except as provided in 35 IAC 218.128(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.

- ii. Available data on the storage temperature may be used to determine the maximum true vapor pressure.
  - A. 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.
  - B. For other liquids, the vapor pressure:
    - 1. Determined by ASTM Method D2879-83, incorporated by reference at 35 IAC 218.112(a)(1);
    - 2. Measured by an appropriate method approved by the Agency and USEPA; or
    - 3. Calculated by an appropriate method approved by the Agency and USEPA.
- iii. The owner or operator of each vessel storing a mixture of indeterminate or variable composition shall be subject to the following:
  - A. 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 35 IAC 218.128(b) above.
  - B. 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:
    - 1. ASTM Method D2879-83, incorporated by reference at 35 IAC 218.112(a)(1);
    - 2. ASTM Method D323-82, incorporated by reference at 35 IAC 218.112(a)(25); or

3. As measured by an appropriate method approved by the Agency.
- iv. 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 35 IAC 218.128(a) and (b) above.

#### 7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected storage tanks to demonstrate compliance with Conditions 5.6.1 and 7.2.5, pursuant to Section 39.5(7)(b) of the Act:

- a. Pursuant to 35 IAC 218.129, the owner or operator of each storage vessel specified in 35 IAC 218.120(a) shall maintain records and furnish reports as required by 35 IAC 218.129(a), (b), or (c) below as appropriate for the control equipment installed to meet the requirements of 35 IAC 218.120. The owner or operator shall keep copies of all reports and records required by this Section, except for the records required by 35 IAC 218.129(c)(1) below, for at least 3 years. The records required by 35 IAC 218.129(c)(1) below shall be kept for the life of the control equipment.
  - i. After installing control equipment in accordance with 35 IAC 218.120(a)(1) or (2) (fixed roof and internal floating roof), the owner or operator shall:
    - A. Furnish the Agency with a report that describes the control equipment and certifies that the control equipment meets the specifications of 35 IAC 218.120(a)(1) and 218.127(a)(1);
    - B. Keep a record of each inspection performed as required by 35 IAC 218.127(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);
    - C. If any of the conditions described in 35 IAC 218.127(a)(2) are detected during the annual visual inspection required by 35 IAC 218.127(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

- D. After each inspection required by 35 IAC 218.127(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 35 IAC 218.127(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 35 IAC 218.120(a)(1) or (2) or 35 IAC 218.127(a), and list each repair made.
- ii. After installing control equipment in accordance with 35 IAC 218.120(a)(3) (external floating roof), the owner or operator shall:
    - A. Furnish the Agency with a report that describes the control equipment and certify that the control equipment meets the specifications of 35 IAC 218.120(a)(3) and 218.127(b)(2), (b)(3), and (b)(4);
    - B. Within 60 days after performing the seal gap measurements required by 35 IAC 218.127(b)(1), furnish the Agency with a report that contains:
      - 1. The date of measurement;
      - 2. The raw data obtained in the measurement; and
      - 3. The calculations of this Subpart described in 35 IAC 218.127(b)(2) and (b)(3);
    - C. Maintain records of each gap measurement performed as required by Section 218.127(b) of this Subpart. Such records shall identify the storage vessel in which the measurement was performed and shall contain:
      - 1. The date of measurement;
      - 2. The raw data obtained in the measurement; and
      - 3. The calculations described in 35 IAC 218.127(b)(2) and (b)(3);
    - D. After each seal gap measurement that detects gaps exceeding the limitations specified by 35 IAC 218.127(b)(4), submit a report to the Agency within 30 days after the inspection identifying the vessel and containing the

information specified in 35 IAC 218.127(b)(2) above and the date the vessel was emptied or the repairs were made and the date of repair.

- iii. After installing control equipment in accordance with 35 IAC 218.127(a)(4) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall maintain the following records:
  - A. A copy of the operating plan; and
  - B. The measured values of the parameters monitored in accordance with 35 IAC 218.127(c)(2).
- iv. After installing a closed vent system and flare to comply with 35 IAC 218.127, the owner or operator shall:
  - A. 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 35 IAC 218.112(d), within 6 months after the initial start-up date;
  - B. Maintain records of all periods of operation during which the flare pilot flame is absent; and
  - C. Report semiannually all periods recorded under 40 CFR 60.115b(d)(2), incorporated by reference at 35 IAC 218.112(d), in which the pilot flame was absent.
- v. The owner or operator shall maintain all records required by this Section, except for the records required by 35 IAC 218.129(f) below, for at least 3 years. The records required by 35 IAC 218.129(f) below shall be kept for the life of the source.
- vi. 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.
- vii. Except as provided in 35 IAC 218.128(c) and (d), the owner or operator of each storage vessel subject to the requirements in 35 IAC 218.120 with a design capacity greater than or equal to 40,000 gallons

storing a liquid with a maximum true vapor pressure greater than or equal to 0.5 psia but less than 0.75 psia shall maintain a record of the VOL storage, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period.

- b.
  - i. The storage of any volatile organic liquid with a true vapor pressure greater than 11.1 psia at 75°F.
  - ii. The storage of any volatile petroleum liquid (VPL) with a vapor pressure of 1.5 psia or greater at 70°F.
- c. The results of any inspections or measurements required by the Condition 7.2.7(I), and/or 7.2.8(i), including:
  - i. Type of inspection.
  - ii. When the inspection and/or measurement was performed.
  - iii. Who performed the inspection and/or measurement.
  - iv. The method of inspection and/or measurement.
  - v. The observed condition of each feature of the internal floating roof (seals, roof deck and fittings) with raw data recorded during the inspection and/or measurement.
  - vi. Summary of compliance.
- d.
  - i. Design information for the affected storage tanks showing the presence of a permanent submerged loading pipe, internal floating roof components, or variable vapor space storage tank components.
  - ii. Maintenance and repair records for the affected storage tanks, specifically as related to the repair or replacement of the loading pipe, internal floating roof components, or variable vapor space storage tank components.
  - iii. The throughput by material with vapor pressure of the affected storage tanks, gal/mo and gal/yr.
  - iv. The monthly and annual VOM and HAP emissions from the storage tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations using the methods in Condition 7.2.12(b).
- e. The Permittee shall maintain a log identifying which unit-specific condition each tank is complying with, listing the date and supporting explanation for change in applicable

requirements, pursuant to Section 39.5(7)(1)(i)(A) of the Act.

#### 7.2.10 Reporting Requirements

##### a. Reporting of Deviations

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

- i. Operation of the affected storage tanks in excess of the requirements specified in Condition 7.2.5 within 30 days of such occurrence.

#### 7.2.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. Changes of the VOL or VPL material stored in the affected storage tanks, provided the affected storage tanks continue to comply with the Conditions in Section 7.2 of this permit.
- b. Pursuant to Section 39.5(7)(1)(A) of the Act, the source must record in a log at the permitted facility a record of the scenario under which it is operating contemporaneously with making a change from one operating scenario to another.

#### 7.2.12 Compliance Procedures

- a. Compliance with the requirements of Conditions 7.2.5 are addressed by testing requirements in Condition 7.2.7, the monitoring requirements in Condition 7.2.8, the records required in Condition 7.2.9, and the reports required in Condition 7.2.10.
- b. Compliance with the VOM emission limitation of Condition 5.6.1 is addressed by the testing required by Condition 7.2.7, the monitoring required by Condition 7.2.8, the records required in Condition 7.2.9, the reports required in Condition 7.2.10, and emission calculations using the emission factor in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, or the most recent version of the

TANKS program is acceptable:

<http://www.epa.gov/ttn/chief/software/tanks/index.html>.

7.3 New Internal Floating Roof Storage Tanks Storing Volatile Organic Liquids (VOL) and/or Volatile Petroleum Liquids (VPL) - NSPS Kb Storage Tanks

7.3.1 Description

The Permittee operates two existing storage tanks which were modified to accommodate the storage of natural gasoline (Construction Permit #06120010). Permanent submerged loading pipes and internal floating roofs are used to minimize turbulence and evaporation of VOM during loading and storage.

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

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Tank 2002	Internal Floating Roof Tank (420,000 gallons)	04/13/2007	Permanent Submerged Loading Pipe and Internal Floating Roof
Tank 2501*	Internal Floating Roof Tank (1,050,000 gallons)	04/13/2007	Permanent Submerged Loading Pipe and Internal Floating Roof

7.3.3 Applicable Provisions and Regulations

- a. The "affected storage tanks" for the purpose of these unit-specific conditions, are storage tanks described in Conditions 7.3.1 and 7.3.2.
- b. The affected storage tanks are subject to the standard for volatile organic compounds (VOC) of 40 CFR 60.112(b)(a)(1).

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected storage tanks are not subject to 35 IAC 218.124, because the affected storage tanks are not equipped with external floating roofs.
- b. The affected storage tanks are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected storage tanks:
  - i. uses a passive control measure, such as a seal, lid, or roof that is not considered a control device because it acts to prevent the release of pollutants.

- ii. are subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

#### 7.3.5 Control Requirements and Work Practices

- a. The Permittee shall follow good operating practices for the affected loading racks, including periodic inspection, routine maintenance and prompt repair of defects.
- b.
  - i. Pursuant to 35 IAC 218.122(b), no person shall 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).
  - ii. Exception: If no odor nuisance exists the limitations of Condition 7.3.5(b)(i) shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- c.
  - i. When storing volatile organic liquid (VOL):  
  
Pursuant to 35 IAC 218.120:  
  
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:  
  
    - 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 35 IAC 218.120(a)(4) below:  
  
      - aa. 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.

- bb. 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.
- cc. 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.

- dd. 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.
  - ee. 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.
  - ff. 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.
  - gg. 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.
  - hh. 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 35 IAC 218.120(a)(1)(A) through (H) above.

3. Each external floating roof tank shall meet the following specifications:
  - aa. Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. 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.
    - i. Except as provided in 35 IAC 218.127(b)(4), the primary seal shall completely cover the annular space between the edge of the floating roof and tank wall and shall be either a liquid mounted seal or a shoe seal.
    - ii. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 35 IAC 218.127(b)(4).
    - iii. The tank shall be equipped with the closure device after the next scheduled tank cleaning, but no later than March 15, 2004.
  - bb. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that 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 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 leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. 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.

- cc. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.
4. A closed vent system and control device respectively shall meet the following specifications:
- aa. 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 35 IAC 218.112(d) of this Part.
  - bb. 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 35 IAC 218.112(d).
5. An alternative emission control plan equivalent to the requirements of 35 IAC 218.120(a)(1), (a)(2), (a)(3), or (a)(4)

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 35 IAC 218.120(a)(4) above.
- C. Notwithstanding subsection (b) of this Section, 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.

ii. When storing volatile petroleum liquid (VPL):

- A. Pursuant to 35 IAC 218.121, no person shall cause or allow the storage of any volatile petroleum liquid (VPL) with a vapor pressure of 10.34 kPa ( 1.5 psia) or greater at 294.3°K (70°F) or any gaseous organic material in any stationary tank, reservoir or other container of more than 151 cubic meters (40,000 gal) capacity unless such tank, reservoir or other container:
  - 1. Is a pressure tank capable of withstanding the vapor pressure of such liquid or the pressure of the gas, so as to prevent vapor or gas loss to the atmosphere at all times; or
  - 2. Is designed and equipped with one of the following vapor loss control devices:
    - aa. A floating roof which rests on the surface of the VPL and is equipped with a closure seal or seals between the roof edge and the tank wall. Such floating roof shall not be permitted if the VPL has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3°K (70°F). No person shall cause or allow the emission of air contaminants into

the atmosphere from any gauging or sampling devices attached to such tanks, except during sampling or maintenance operations.

- bb. A vapor recovery system consisting of:
  - i. A vapor gathering system capable of collecting 85% or more of the uncontrolled VOM that would be otherwise emitted to the atmosphere; and
  - ii. A vapor disposal system capable of processing such VOM so as to prevent its emission to the atmosphere. No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tank, reservoir or other container except during sampling.
- cc. Other equipment or means of equal efficiency approved by the Agency according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 218.108.

- B. Pursuant to 35 IAC 218.123(b), no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
  - 1. The tank is equipped with one of the vapor loss control devices specified in 35 IAC 218.121(b);
  - 2. There are no visible holes, tears or other defects in the seal or any seal fabric or material of any floating roof;
  - 3. All openings of any floating roof deck, except stub drains, are equipped with covers, lids or seals such that:
    - aa. The cover, lid or seal is in the closed position at all times except

when petroleum liquid is transferred to or from the tank;

- bb. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and
  - cc. Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;
- 4. Routine inspections of floating roof seals are conducted through roof hatches once every six months;
  - 5. A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect; and
  - 6. A record of the results of each inspection conducted under 35 IAC 218.123(b)(4) or (b)(5) is maintained.
- d.
    - i. The vapor pressure of material stored in the affected units shall be less than 8.3 psia, on a monthly average [T1].
    - ii. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].
    - iii. The above limitations were established in Permit 06120010, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

#### 7.3.6 Production and Emission Limitations

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

- a. i. The material throughput for the affected units shall not exceed 10,160,640 gallons/month and 101,606,400 gallons/year. [T1].
- ii. Emissions of VOM and any individual HAP from the affected units shall not exceed 6.94 and 0.50 tons/year, total, respectively. Compliance with these limits shall be determined from standard emission estimation methodology published by USEPA, such as the TANKS Program or Chapter 5.2, "Transportation and Marketing of Petroleum Liquids," from USEPA's Compilation of Air Pollutant Emission Factors (AP-42) [T1].
- iii. 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].
- iv. The above limitations were established in Permit 06120010, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

#### 7.3.7 Testing Requirements

- a. The affected storage tanks are subject to the testing and procedures of 40 CFR 60.113(b)(a).
- b. i. Pursuant to 35 IAC 218.127, the owner or operator of each storage vessel specified in 35 IAC 218.119 shall comply with the requirements of 35 IAC 218.127(a), (b), or (c) below. The applicable subsection for a particular storage vessel depends on the control equipment installed to meet the requirements of this Subpart.
  - A. After installing the control equipment necessary for the source to comply with the requirements of 35 IAC 218.120(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 this subsection 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 35 IAC 218.129(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 30 days.
3. For vessels equipped with both primary and secondary seals:
  - aa. Visually inspect the vessel as specified in 35 IAC 18.127(a)(4) below at least every 5 years; or
  - bb. Visually inspect the vessel as specified in 35 IAC 18.127(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 35 IAC 218.127(a)(2) and (a)(3)(B) above and at intervals no greater than 5 years in the case of vessels specified in 35 IAC 218.127(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 35 IAC 218.127(a)(1) and (a)(4) above to afford the Agency the opportunity to have an observer present. If the inspection required by subsection (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 external floating roof tanks shall:

1. Determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel.

- aa. Measurements of gaps between the tank wall the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days after the initial fill with VOL and at least once every 5 years thereafter.
  - bb. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days after the initial fill with VOL and at least once per year thereafter.
  - cc. If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of 35 IAC 218.127(b)(1)(A) and (b)(1)(B) above.
2. Determine gap widths and areas in the primary and secondary seals individually according to the following procedures:
- aa. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports;
  - bb. Measure seal gaps around the entire circumference of the tank in each place where a 1/8 inch in diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location; and
  - cc. Determine the total surface area of each gap described in 35 IAC 218.127(b)(2)(B) above by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.
3. Add the gap surface area of each gap location for the primary seal and the

secondary seal individually and divide the sum for each by the nominal diameter of the tank and compare each ratio to the respective standards in 35 IAC 218.127(b)(4) below.

4. Make necessary repairs or empty the storage vessel within 45 days after identification in any inspection for seals not meeting the requirements listed in 35 IAC 218.127(b)(4)(A) and (B) below:
  - aa. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 10 in.(2) per foot of tank diameter, and the width of any portion of any gap shall not exceed 1.5 in. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
  - bb. The secondary seal is to meet the following requirements:
    - i. 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 35 IAC 218.127(b)(2)(C) above.
    - ii. 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 1.0 in.(2) per foot of tank diameter, and the width of any portion of any gap shall not exceed 0.5 in. There shall be no gaps between the tank wall and the secondary seal when used in combination with a vapor mounted primary seal.
    - iii. There are to be no holes, tears, or other openings in the seal or seal fabric.

cc. If a failure that is detected during inspections required in 35 IAC 218.127(b)(1) 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 35 IAC 218.129(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

5. Notify the Agency 30 days in advance of any gap measurements required by 35 IAC 218.127(b)(1) above to afford the Agency the opportunity to have an observer present.

6. Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

aa. If the external floating roof has defects, if the primary seal has holes, tears, or other openings in the seal or the seal fabric, or if the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this subsection exist before filling or refilling the storage vessel with VOL.

bb. For all the inspections required by 35 IAC 218.127(b)(6) above, the owner or operator shall notify the Agency in writing at least 30 days prior to filling or refilling of each storage vessel to afford the Agency the opportunity to inspect the storage vessel 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 sent by express mail so that it is received by the Agency at least 7 days prior to the refilling.

- C. The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements of 35 IAC 218.120(a)(4) shall meet the requirements specified in the general control device requirements of 40 CFR 60.18(e) and (f), incorporated by reference at 35 IAC 218.112(d).

#### 7.3.8 Monitoring Requirements

- a. The affected storage tanks are subject to the monitoring of operations of 40 CFR 60.116(b).
- b. Pursuant to 35 IAC 218.128:
  - i. Except as provided in 35 IAC 218.128(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.
  - ii. Available data on the storage temperature may be used to determine the maximum true vapor pressure.
    - A. 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.
    - B. For other liquids, the vapor pressure:
      - 1. Determined by ASTM Method D2879-83, incorporated by reference at 35 IAC 218.112(a)(1);
      - 2. Measured by an appropriate method approved by the Agency and USEPA; or

3. Calculated by an appropriate method approved by the Agency and USEPA.
- iii. The owner or operator of each vessel storing a mixture of indeterminate or variable composition shall be subject to the following:
- A. 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 35 IAC 218.128(b) above.
  - B. 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:
    1. ASTM Method D2879-83, incorporated by reference at 35 IAC 218.112(a)(1);
    2. ASTM Method D323-82, incorporated by reference at 35 IAC 218.112(a)(25); or
    3. As measured by an appropriate method approved by the Agency.
- iv. 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 35 IAC 218.128(a) and (b) above.

#### 7.3.9 Recordkeeping Requirements

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

- a. The affected storage tanks are subject to the recordkeeping requirements of 40 CFR 60.115(b)(a)(2).
- b. Pursuant to 35 IAC 218.129, the owner or operator of each storage vessel specified in 35 IAC 218.120(a) shall maintain records and furnish reports as required by 35 IAC 218.129(a), (b), or (c) below as appropriate for the control equipment installed to meet the requirements of 35 IAC 218.120. The owner or operator shall keep copies of all reports and records required by this Section, except for the records required by 35 IAC 218.129(c)(1) below, for

at least 3 years. The records required by 35 IAC 218.129(c)(1) below shall be kept for the life of the control equipment.

- i. After installing control equipment in accordance with 35 IAC 218.120(a)(1) or (2) (fixed roof and internal floating roof), the owner or operator shall:
  - A. Furnish the Agency with a report that describes the control equipment and certifies that the control equipment meets the specifications of 35 IAC 218.120(a)(1) and 218.127(a)(1);
  - B. Keep a record of each inspection performed as required by 35 IAC 218.127(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);
  - C. If any of the conditions described in 35 IAC 218.127(a)(2) are detected during the annual visual inspection required by 35 IAC 218.127(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
  - D. After each inspection required by 35 IAC 218.127(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 35 IAC 218.127(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 35 IAC 218.120(a)(1) or (2) or 35 IAC 218.127(a), and list each repair made.
- ii. After installing control equipment in accordance with 35 IAC 218.120(a)(3) (external floating roof), the owner or operator shall:
  - A. Furnish the Agency with a report that describes the control equipment and certify that the control equipment meets the specifications of 35 IAC 218.120(a)(3) and 218.127(b)(2), (b)(3), and (b)(4);

- B. Within 60 days after performing the seal gap measurements required by 35 IAC 218.127(b)(1), furnish the Agency with a report that contains:
    - 1. The date of measurement;
    - 2. The raw data obtained in the measurement; and
    - 3. The calculations of this Subpart described in 35 IAC 218.127(b)(2) and (b)(3);
  
  - C. Maintain records of each gap measurement performed as required by Section 218.127(b) of this Subpart. Such records shall identify the storage vessel in which the measurement was performed and shall contain:
    - 1. The date of measurement;
    - 2. The raw data obtained in the measurement; and
    - 3. The calculations described in 35 IAC 218.127(b)(2) and (b)(3);
  
  - D. After each seal gap measurement that detects gaps exceeding the limitations specified by 35 IAC 218.127(b)(4), submit a report to the Agency within 30 days after the inspection identifying the vessel and containing the information specified in 35 IAC 218.127(b)(2) above and the date the vessel was emptied or the repairs were made and the date of repair.
- iii. After installing control equipment in accordance with 35 IAC 218.127(a)(4) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall maintain the following records:
- A. A copy of the operating plan; and
  - B. The measured values of the parameters monitored in accordance with 35 IAC 218.127(c)(2).
- iv. After installing a closed vent system and flare to comply with 35 IAC 218.127, the owner or operator shall:
- A. 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 35 IAC 218.112(d), within 6 months after the initial start-up date;

- B. Maintain records of all periods of operation during which the flare pilot flame is absent; and
  - C. Report semiannually all periods recorded under 40 CFR 60.115b(d)(2), incorporated by reference at 35 IAC 218.112(d), in which the pilot flame was absent.
- v. The owner or operator shall maintain all records required by this Section, except for the records required by 35 IAC 218.129(f) below, for at least 3 years. The records required by 35 IAC 218.129(f) below shall be kept for the life of the source.
  - vi. 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.
  - vii. Except as provided in 35 IAC 218.128(c) and (d), the owner or operator of each storage vessel subject to the requirements in 35 IAC 218.120 with a design capacity greater than or equal to 40,000 gallons storing a liquid with a maximum true vapor pressure greater than or equal to 0.5 psia but less than 0.75 psia shall maintain a record of the VOL storage, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period.
- b. The storage of any volatile organic liquid with a true vapor pressure greater than 11.1 psia at 75°F.
  - c. The results of any inspections or measurements required by the Condition 7.2.7(I), and/or 7.2.8(i), including:
    - i. Type of inspection.
    - ii. When the inspection and/or measurement was performed.
    - iii. Who performed the inspection and/or measurement.
    - iv. The method of inspection and/or measurement.

- v. The observed condition of each feature of the internal floating roof (seals, roof deck and fittings) with raw data recorded during the inspection and/or measurement.
- vi. Summary of compliance.
- d.
  - i. Design information for the affected storage tanks showing the presence of a permanent submerged loading pipe, internal floating roof components, or variable vapor space storage tank components.
  - ii. Maintenance and repair records for the affected storage tanks, specifically as related to the repair or replacement of the loading pipe, internal floating roof components, or variable vapor space storage tank components.
  - iii. The throughput by VOL material with vapor pressure of the affected storage tanks, gal/mo and gal/yr.
  - iv. The monthly and annual VOM and HAP emissions from the storage tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations using the methods in Condition 7.2.12(b).
- e. The Permittee shall maintain a log identifying which unit-specific condition each tank is complying with, listing the date and supporting explanation for change in applicable requirements, pursuant to Section 39.5(7)(1)(i)(A) of the Act.

#### 7.3.10 Reporting Requirements

##### a. Reporting of Deviations

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

- i. Emissions of VOM from the affected storage tanks in excess of the limits specified in Conditions 7.3.6 within 30 days of such occurrence.
  - ii. Operation of the affected storage tanks in excess of the limits specified in Condition 7.3.5 within 30 days of such occurrence.
- b. The affected storage tanks are subject to the reporting requirements of 40 CFR 60.115(b)(a).

### 7.3.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected storage tanks.

### 7.3.12 Compliance Procedures

- a. Compliance with Conditions 7.3.3(b) is addressed by the requirements of Condition 7.3.5, the testing requirements in Condition 7.3.7, the monitoring requirements in Condition 7.3.8, the records required in Condition 7.3.9, and the reports required in Condition 7.3.10.
- b. Compliance with Conditions 7.3.5(I), (II), (III), and (IV) are addressed by testing requirements in Condition 7.3.7, the monitoring requirements in Condition 7.3.8, the records required in Condition 7.3.9, and the reports required in Condition 7.3.10.
- c. Compliance with the VOM emission limitation of Condition 5.6.1 is addressed by the testing required by Condition 7.3.7, the monitoring required by Condition 7.2.8, the records required in Condition 7.3.9, the reports required in Condition 7.3.10, and emission calculations using the emission factor in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, or the most recent version of the TANKS program is acceptable:  
<http://www.epa.gov/ttn/chief/software/tanks/index.html>.

#### 7.4 Rail and Truck Loading/Unloading Rack

##### 7.4.1 Description

The Permittee operates a three loading point truck loading rack used to load and unload various petroleum products. The truck loading/unloading station is controlled by a vapor collection system and flare.

The Permittee operates a railroad tank car loading station used for loading and unloading fuel ethanol and a truck loading/unloading rack (three loading spots) used to load and unload VOL products such as natural gasoline. The rail loading station is controlled by a vapor collection and flare.

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

##### 7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Truck Loading Rack	Three Bay Loading Rack Used for Loading Various Petroleum Products into Tank Trucks	1950	Vapor Collection System and Flare
Railroad Tank Car Loading Rack	Four Bay Loading Rack Used for Loading Fuel Ethanol and VOL into Railroad Tank Cars	11/03/05 modified: 04/13/07	Vapor Collection System and Flare

##### 7.4.3 Applicable Provisions and Regulations

- a.
  - i. The "affected loading rack(s)" for the purpose of these unit-specific conditions, are loading rack(s) described in Conditions 7.4.1 and 7.4.2.
  - ii. A "gasoline tank truck" is a delivery tank truck used at bulk gasoline terminals which is loading gasoline or has loaded gasoline on the immediately previous load.
- b.
  - i. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading area having through-put of greater than 151 cubic meters per day (40,000 gal/day) into any railroad tank car, tank truck or trailer unless such loading area is equipped with submerged loading pipes

or a device that is equally effective in controlling emissions and is approved by the Agency according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 218.108, pursuant to 35 IAC 218.122(a).

- ii. Exception: If no odor nuisance exists the limitations of this Section shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F), pursuant to 35 IAC 218.122(c).

#### 7.4.4 Non-Applicability of Regulations of Concern

- a. i. The affected truck loading racks are not subject to the New Source Performance Standards (NSPS) for Standards of Performance for Bulk Gasoline Terminals, 40 CFR Part 60, Subpart XX, because the affected loading racks were not constructed or modified after December 17, 1980, pursuant to 40 CFR 60.500(c).

Note: To qualify for this non-applicability, the Permittee has certified that the affected loading racks have not been modified or reconstructed after December 17, 1980.

- ii. The affected rail loading racks are not subject to the New Source Performance Standards (NSPS) for Standards of Performance for Bulk Gasoline Terminals, 40 CFR Part 60, Subpart XX, because the standard only applies to bulk gasoline terminals which deliver liquid product into gasoline tank trucks, pursuant to 40 CFR 60.500(a).
- b. The affected loading racks are not subject to the National Emission Standards Hazardous Air Pollutants (NESHAP) for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), 40 CFR Part 63, Subpart R, because the affected loading racks are not located at a major source of HAP emissions.

#### 7.4.5 Control Requirements and Work Practices

- a. The Permittee shall follow good operating practices for the affected loading racks, including periodic inspection, routine maintenance and prompt repair of defects.
- b. Rail cars shall only be loaded using bottom filling.

#### 7.4.6 Production and Emission Limitations

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

- a. i. Emissions from the affected truck loading rack shall not exceed the following limits:

VOM Emissions	
<u>(ton/month)</u>	<u>(ton/year)</u>
4.00	30.26

These limits are based on the maximum emissions from the affected loading rack using AP-42 emission factors, capture and control efficiencies listed in Condition 7.4.12, and the typical annual throughput [T1].

- ii. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].
- b. i. The fuel ethanol throughput for the affected railroad tank car loading rack shall not exceed 1,260,000 gallons/month and 12,600,000 gallons/year [T1].
- ii. VOM emissions from the affected railroad tank car loading rack shall not exceed 0.5 tons/month and 4.3 tons/year [T1].
- iii. 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].
- iv. The above limitations were established in Permit 05080023, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].
- c. i. The material throughput for the affected railroad tank car loading rack shall not exceed 10,160,640 gallons/month and 101,606,400 gallons/year of natural gasoline or other VOL with a vapor pressure of 2.5 psia or greater at standard conditions [T1].
- ii. A. Emissions of VOM from the affected railroad tank car shall not exceed 1.86 tons/month and 18.55 tons/year. Emissions of any individual HAP from the affected unit shall not exceed 0.04 tons/month and 0.36 tons/year. Compliance with these limits shall be determined from standard emission estimate methodology published by USEPA, such as Chapter 5.2,

"Transportation and Marketing of Petroleum Liquids" in AP-42 [T1].

- B. This permit is issued based on negligible emissions of VOM from leaks in the components of the piping system for the affected units, i.e., valves, pumps, flanges, etc. For this purpose, VOM emissions shall not exceed 0.44 tons/year [T1].
- iii. 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].
- iv. The above limitations were established in Permit 06120010, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].
- v.
  - A. CO and NOx emissions from the flare control system associated with loadout of material by the affected railroad tank car shall not exceed 0.835 and 0.0334 lbs/1,000 gallons loaded and 4.24 and 1.7 tons/year, respectively [T1R].
  - B. This permit is issued based on negligible emissions of PM from the flare control system associated with loadout of material by the affected railroad tank car. For this purpose, emissions of each pollutant shall not exceed 0.44 tons/year [T1R].
  - C. The above limitations contain revisions to previously issued Permit 951200270. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically MSSCAM and/or PSD. These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains

the most current and accurate information for the source. Specifically, revision was necessary due to inappropriate flare emission factors and subsequent permit limits established in the construction permit. The revisions increased the allowed permitted emissions but did not trigger any new applicable rules or thresholds [T1R].

#### 7.4.7 Testing Requirements

- a. i. Upon written request by the Illinois EPA, the Permittee shall have the physical condition and ability to comply with the applicable equipment requirements of Condition 7.4.3(b) and (c) or Condition 7.4.6, pursuant to Section 39.5(7)(d) of the Act.
- ii. Such testing shall be conducted for specific affected loading rack(s) within 60 calendar days of the request, or on the date agreed upon by the Illinois EPA, whichever is later.
- iii. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).
- iv. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.
- v. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- vi. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
  - A. Date and time of testing.
  - B. Name and employer of tester.
  - C. Description of operating conditions.
  - D. Conclusions.

#### 7.4.8 Monitoring Requirements

- a. Compliance Assurance Monitoring (CAM) Requirements

The affected loading racks are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary

Sources. The Permittee shall comply with the monitoring requirements of the Compliance Assurance Monitoring (CAM) Plan described in Attachment 3, Table 3.1 pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment [40 CFR 64.7(a) and (b)].

- b. On an annual basis, in the period between March 1 and April 30 of each year, the Permittee shall conduct an inspection of the affected loading racks to review the physical condition and ability to comply with the applicable equipment requirements, pursuant to sections 39.5(7)(a) and (d) of the Act.

#### 7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected loading racks to demonstrate compliance with Conditions 5.6.1, 7.4.3, 7.4.5, and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

- a. A file containing the specification for the flare control system and the emissions factor used by the Permittee to determine CO emissions, with supporting documentation.
- b. Material throughput, by type (gallons/month and gallons/year).
- c. An operating log and a maintenance/repair log (or other comparable records) for the affected unit and associated vapor collection and control system.
- d. VOM, CO, PM, and HAP emissions (tons/month and tons/year), with supporting calculations.
- e. Records for Compliance Assurance Monitoring (CAM) Requirements

The Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements in Condition 7.4.8(a), as required by 40 CFR 64.9(b)(1).

#### 7.4.10 Reporting Requirements

- a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected loading rack(s) with the permit requirements as follows, pursuant

to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. Emissions of VOM and HAP from the affected loading rack(s) in excess of the limits specified in Conditions 7.4.3 and 7.4.6 within 30 days of such occurrence.
  - ii. Emissions of CO from the flare control system in excess of the limits specified in Condition 7.4.6 within 30 days of such occurrence.
  - iii. Operation of the affected loading racks in excess of the limits specified in Condition 7.4.6 within 30 days of such occurrence.
- b. Reporting of Compliance Assurance Monitoring (CAM)

The Permittee shall submit monitoring reports to the Illinois EPA in accordance with Condition 8.6.1 and shall include, at a minimum, the information required under Condition 8.6.1 and the following information:

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

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. i. Each affected loading rack used to transfer gasoline into a delivery vessel from any bulk gasoline terminal is subject to the requirements of 35 IAC 218.582 below.

Pursuant to 35 IAC 218.582:

- A. No person shall cause or allow the transfer of gasoline into any delivery vessel from any bulk gasoline terminal unless:

1. The bulk gasoline terminal is equipped with a vapor control system that limits emission of VOM to 80 mg/l (0.00067 lbs/gal) of gasoline loaded;
2. The vapor control system is operating and all vapors displaced in the loading of gasoline to the delivery vessel are vented only to the vapor control system;
3. There is no liquid drainage from the loading device when it is not in use;
4. All loading and vapor return lines are equipped with fittings which are vapor tight; and
5. The delivery vessel displays the appropriate sticker pursuant to the requirements of Section 218.584(b) or (d) of this Part; or, if the terminal is driver-loaded, the terminal owner or operator shall be deemed to be in compliance with this Section when terminal access authorization is limited to those owners and/or operators of delivery vessels who have provided a current certification as required by Section 218.584(c)(3) of this Part.

B. The operator of a bulk gasoline terminal shall:

1. Operate the terminal vapor collection system and gasoline loading equipment in a manner that prevents:
  - aa. Gauge pressure from exceeding 18 inches of water and vacuum from exceeding 6 inches of water as measured as close as possible to the vapor hose connection; and
  - bb. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B, incorporated by reference in Section 218.112 of this Part; and
  - cc. Avoidable leaks of liquid during loading or unloading operations.

2. Provide a pressure tap or equivalent on the terminal vapor collection system in order to allow the determination of compliance with Section 218.582(d)(1)(A) of this Part; and
3. Within 15 business days after discovery of the leak by the owner, operator, or the Agency repair and retest a vapor collection system which exceeds the limits of subsection (c)(1)(A) or (B) of this Section.
  - ii. Pursuant to 35 IAC 211.810, "bulk gasoline terminal" means any gasoline storage and distribution source that receives gasoline by pipeline, ship or barge, and distributes gasoline to bulk gasoline plants or gasoline dispensing operations.
  - iii. Pursuant to 35 IAC 211.2570, "gasoline" means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kPa or greater which is used as a fuel for internal combustion engines.

7.4.12 Compliance Procedures

- a. Compliance with the VOM emission limitation of Condition 7.4.3(b) is addressed by the requirements of Condition 7.4.5, the testing requirements in Condition 7.4.7(a), the monitoring requirements in Condition 7.4.8(a and b), the records required in Condition 7.4.9, and the reports required in Condition 7.4.10.
- b. Compliance with Condition 7.4.5 is addressed by the records and reports required in Conditions 7.4.9 and 7.4.10.
- c. Compliance with the VOM emission limitation of Condition 7.4.11(a) is addressed by the requirements of Condition 7.4.5, the testing requirements in Condition 7.4.7(a), the monitoring requirements in Condition 7.4.8(a and b), the records required in Condition 7.4.9, and the reports required in Condition 7.4.10.
- d. i. Compliance with the VOM emission limitations of Condition 7.4.6(a) is addressed by the requirements of Condition 7.4.5, the records required in Condition 7.4.9, and the reports required in Condition 7.4.10, and the emission factors and formulas listed below:

$$\text{Total Emissions (lb/month)} = \text{Uncontrolled Emissions} \times [0.013 + 0.987 \times 0.03]$$

Uncontrolled Emissions (lb/month) = Gasoline Throughput (gal/month) x  $LL_g$  + Ethanol Throughput (gal/month) x  $LL_e$

Where:

$LL_g$  = 8.69 lb/1000 gallons of gasoline loaded

$LL_e$  = 0.54 lb/1000 gallons of ethanol loaded

The emission factors above are for the loading of gasoline and ethanol, respectively, based on the AP-42 equation for loading of tank trucks.

- ii. Compliance with the VOM emission limitations of Condition 7.4.6(b) is addressed by the requirements of Condition 7.4.5, the testing requirements in Condition 7.4.7, the monitoring requirements in Condition 7.4.8, the records required in Condition 7.4.9, and the reports required in Condition 7.4.10, and emission calculations using the emission factor in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, for Transportation and Marketing of Petroleum Liquids Chapter 5.2.
- iii. Compliance with the VOM emission limitations of Condition 7.4.6(c) is addressed by the requirements of Condition 7.4.5, the testing requirements in Condition 7.4.7, the monitoring requirements in Condition 7.4.8, the records required in Condition 7.4.9, and the reports required in Condition 7.4.10, and emission calculations using the emission factor in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, for Transportation and Marketing of Petroleum Liquids Chapter 5.2.

7.5 Barge Loading Station

7.5.1 Description

The barge loading station is used to load ethanol and refined fuel oil into barges. The VOM emissions from the barge loading station occur as organic vapors are displaced to the atmosphere by the liquid being loaded into marine vessels.

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

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Barge Loading Station	Ethanol and Fuel Oil Loading	Prior to 1973	None

7.5.3 Applicable Provisions and Regulations

- a. The "affected barge loading station" for the purpose of these unit-specific conditions, is a barge loading station described in Conditions 7.5.1 and 7.5.2.

Note: Control requirements and work practices for this emission unit is established in 7.5.5.

7.5.4 Non-Applicability of Regulations of Concern

- a. The affected barge loading station is not subject to the emission standards of 40 CFR Part 63, Subpart Y Marine Tank Vessel Loading Operations, because the affected barge loading station is an existing sources with emissions less than 10 and 25 tons pursuant to 40 CFR 63.560(a)(2).
- b. The affected barge loading station is not subject to 35 IAC 218 Subpart GG: Marine Terminals, because the affected barge loading station does not load and is not permitted to load gasoline or crude oil pursuant to 35 IAC 218.760(a).
- c. The affected barge loading station is not subject to 35 IAC 218 Subpart TT: Other Emission Units, because the control requirements in Subpart TT shall not apply to barge loading facilities, pursuant to 35 IAC 218.980(f).
- d. The affected barge loading station is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected barge loading station does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.5.5 Control Requirements and Work Practices

- a. The Permittee shall follow good operating practices for the affected barge loading station, including periodic inspection, routine maintenance and prompt repair of defects.
- b. The affected barge loading station:
  - i. May load and unload:

Volatile organic liquid (VOL), which means any substance which is liquid at storage conditions and which contains volatile organic material, pursuant to 35 IAC 211.7110.

Volatile petroleum liquid (VPL), which means any petroleum liquid with a true vapor pressure that is greater than 1.5 psia (78 millimeters of mercury) at standard conditions, pursuant to 35 IAC 211.7170.
  - ii. Shall not load or unload gasoline or crude oil onto a marine vessel, unless such loading is associated with fueling of the marine vessel.

7.5.6 Production and Emission Limitations

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

- a. i. Emissions from the affected barge loading station shall not exceed the following limits:

VOM Emissions	
<u>(ton/month)</u>	<u>(ton/year)</u>
1.00	5.00

These limits are based on the maximum worst-case emissions from the affected loading station using AP-42 emission factors and the maximum throughput (29 million gallons per year) [T1].

- ii. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].
- iii. The above limitations were established in Permit 95120027, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification

pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

7.5.7 Testing Requirements

Testing requirements are not set for the affected barge loading station.

7.5.8 Monitoring Requirements

Monitoring requirements are not set for the affected barge loading station.

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected barge loading station to demonstrate compliance with Conditions 5.6.1 and 7.5.3(b) and 7.5.6(a), pursuant to Section 39.5(7)(b) of the Act:

- a. The identification and properties of each VOL or VPL distributed through the affected barge loading station, as related to emissions, i.e., vapor pressure and molecular weight, etc.
- b. The amount of each VOL or VPL distributed through the affected barge loading station, in gallons/month and gallons/year, with annual records updated each month by totaling the throughput for that month plus the preceding 11 months.
- c. Emissions of VOM tons/month and tons/year, with supporting calculations, calculated utilizing an approved USEPA methodology, such as Section 5.2 of the AP-42, with annual records updated each month by totaling the emissions for that month plus the preceding 11 months.
- d. The Permittee shall keep onsite records of the results of periodic inspections, routine maintenance, and repair of defects. Upon request, these documents shall be made available for inspection and copying by the Illinois EPA.
- e. Pursuant to 40 CFR 63.567(j)(4), owners or operators of marine tank vessel loading operations specified in 40 CFR 63.560(a)(3) shall retain records of the emissions estimates determined in 40 CFR 65.565(1), below, and records of their actual throughputs by commodity, for 5 years.
  - i. Pursuant to 40 CFR 63.565(1), for sources with emissions less than 10 or 25 tons and sources with emissions of 10 or 25 tons, the owner or operator shall calculate an annual estimate of HAP emissions,

excluding commodities exempted by 40 CFR 63.560(d), from marine tank vessel loading operations. Emission estimates and emission factors shall be based on test data, or if test data is not available, shall be based on measurement or estimating techniques generally accepted in industry practice for operating conditions at the source.

#### 7.5.10 Reporting Requirements

##### a. Reporting of Deviations

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

- i. A. Emissions of VOM from the affected barge loading station in excess of the limits specified in Condition 7.5.6 within 30 days of such occurrence.
- B. Operation of the affected barge loading station in excess of the limits specified in Condition 7.5.5 within 30 days of such occurrence.
- ii. A. The monthly and annual throughputs for the affected barge loading station for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total emission limit of Condition 7.5.6(a), gallons/month and gallons/year (e.g., for the annual totals, for the month of January, the throughput from February of the preceding year through January, for the month of February, the throughput from March of the preceding calendar year through February, etc.);
- B. The monthly and annual emissions of VOM attributable to the loading of petroleum products for the affected loading station for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total emission limit of Condition 7.5.6(a), tons/month and tons/year (e.g., for the annual totals, for the month of January, the emissions from February of the preceding year through January, for the month of February, the emissions from March of the preceding calendar year through February, etc.); and

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected barge loading station.

7.5.12 Compliance Procedures

- a. Compliance with the VOM emission limitations of Condition 7.5.6(a) is addressed by the requirements of Condition 7.5.5, the records required in Condition 7.5.9, and the reports required in Condition 7.5.10, and the emission factors and formulas listed below:

Total Emissions (lb/month) = Fuel Oil Throughput  
(gal/month) x LLf + Ethanol Throughput (gal/month) x LLe

Where:

LLf = 0.012 lb/1000 gallons of fuel oil loaded  
LLe = 0.342 lb/1000 gallons of ethanol loaded

The emission factors above are for the loading of barges from AP-42 Section.

## 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 November 12, 2010 (the date of issuance of the proposed permit) unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

### 8.3 Emissions Trading Programs

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

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

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

#### 8.4.2 Changes Requiring Prior Notification

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

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test

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

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

## 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit.

Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

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

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

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

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

#### 8.6.2 Test Notifications

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

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

#### 8.6.3 Test Reports

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

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

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

#### 8.6.4 Reporting Addresses

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

- i. Illinois EPA - Air Compliance Unit

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

- ii. Illinois EPA - Air Quality Planning Section

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

iii. Illinois EPA - Air Regional Field Office

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

iv. USEPA Region 5 - Air Branch

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

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

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

8.7 Title I Conditions

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

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

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

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

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

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

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment),

practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any regulated activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply with Other Requirements

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

#### 9.5 Liability

##### 9.5.1 Title

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

##### 9.5.2 Liability of Permittee

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

##### 9.5.3 Structural Stability

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

##### 9.5.4 Illinois EPA Liability

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

##### 9.5.5 Property Rights

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

## 9.6 Recordkeeping

### 9.6.1 Control Equipment Maintenance Records

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

### 9.6.2 Records of Changes in Operation

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

### 9.6.3 Retention of Records

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

## 9.7 Annual Emissions Report

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

## 9.8 Requirements for Compliance Certification

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

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

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

- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

#### 9.9 Certification

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

#### 9.10 Defense to Enforcement Actions

##### 9.10.1 Need to Halt or Reduce Activity Not a Defense

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

##### 9.10.2 Emergency Provision

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

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

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

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed

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

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

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

#### 9.11 Permanent Shutdown

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

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

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

##### 9.12.2 Reopening and Revision

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

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit.
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program.
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

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

#### 9.12.3 Inaccurate Application

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

#### 9.12.4 Duty to Provide Information

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

#### 9.13 Severability Clause

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

#### 9.14 Permit Expiration and Renewal

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

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

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

9.15 General Authority for the Terms and Conditions of this Permit

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

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

**10.0 ATTACHMENTS**

Attachment 1 Example Certification by a Responsible Official

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

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Attachment 2 Emissions of Particulate Matter from Process Emission Units

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

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

where:

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

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

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

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

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

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

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

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

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

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

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

where:

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

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

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

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

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

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

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

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

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

Table 3.1 PSEU Designation:	Rail and Truck Loading/Unloading Rack
Significant Emission Unit Section:	7.6
Pollutant:	VOM

Indicators:	#1: Flare Temperature	#2: N/A
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GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	Continuous temperature Monitoring	N/A
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	1400°F	N/A
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	N/A	N/A

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	Thermocouple	N/A
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	Daily Inspection	N/A
QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	Calibration and needed maintenance	N/A
THE MONITORING FREQUENCY:	Continuous	N/A
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Temperature Chart Recorder	N/A
THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:	Hourly	N/A

Attachment 4 Guidance

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

Guidance On Revising A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-revising.pdf](http://www.epa.state.il.us/air/caapp/caapp-revising.pdf)

Guidance On Renewing A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-renewing.pdf](http://www.epa.state.il.us/air/caapp/caapp-renewing.pdf)

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

[www.epa.state.il.us/air/caapp/index.html](http://www.epa.state.il.us/air/caapp/index.html)

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

[www.epa.state.il.us/air/caapp/199-caapp.pdf](http://www.epa.state.il.us/air/caapp/199-caapp.pdf)

[www.epa.state.il.us/air/permits/197-fee.pdf](http://www.epa.state.il.us/air/permits/197-fee.pdf)

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