

PROPOSED CAAPP PERMIT  
October 25, 2007

217/782-2113

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

PERMITTEE:

CITGO Petroleum Corporation  
Attn: Scott Buckner  
2316 Terminal Drive  
Arlington Heights, Illinois 60005

I.D. No.: 031804AAM  
Application No.: 95060051

Date Received: December 12, 2003  
Date Issued: **Date Issued**  
Expiration Date<sup>1</sup>: **Expiration Date**

Operation of: CITGO Arlington Heights Terminal, Petroleum Bulk Terminal  
Source Location: 2316 Terminal Drive, Mt. Prospect, Cook County  
Responsible Official: Scott Buckner, Environmental & Safety Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a petroleum 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 Mike Davidson at 217/782-2113.

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

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

ECB:MED:psj

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

<sup>1</sup> Except as provided in Conditions 1.5 and 8.7 of this permit.

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## 1.0 INTRODUCTION

### 1.1 Source Identification

CITGO Arlington Heights Terminal  
2316 Terminal Drive  
Arlington Heights, Illinois 60005  
847/437-3463

I.D. No.: 031804AAM  
County: Cook  
Standard Industrial Classification: 5171, Petroleum Bulk Stations and  
Terminals

### 1.2 Owner/Parent Company

CITGO Petroleum Corporation  
1293 Eldridge Parkway  
Houston, Texas 77210

### 1.3 Operator

CITGO Petroleum Corporation  
2316 Terminal Drive  
Arlington Heights, Illinois 60005

Scott Buckner, Environmental & Safety Manager  
847/437-3463

### 1.4 Source Description

The CITGO Petroleum Corporation (CITGO) Arlington Heights Terminal has its main office at 2316 Terminal Drive, Arlington Heights, Illinois 60005. The source is a bulk petroleum storage and distribution terminal for various petroleum products. Petroleum products are brought in via pipeline and tanker truck and are temporarily stored prior to distribution. Product is distributed to different destinations via pipeline or distributed to gasoline retail operations by way of tanker truck. Truck loading racks are used for this purpose.

Illinois EPA previously issued separate CAAPP permits for the two adjacent petroleum storage and distribution terminals known as the CITGO Mt. Prospect Terminal, located at 2316 Terminal Drive, Arlington Heights, Illinois (ID No. 031804AAM - CAAPP No. 95060051) and P.D.V. Midwest Refining (PDVMR) Des Plaines Terminal, at 2304 Terminal Drive, Mt. Prospect, Illinois 60056 (ID No. 031804AAL - CAAPP No. 95060124). Both facilities are operated by the CITGO Petroleum Corporation and are considered to be a single source for CAAPP and Title I of the Clean Air Act purposes.

For operational reasons, CITGO Petroleum Corporation has elected to "incorporate" the Mt. Prospect and Des Plaines facilities into a single CAAPP permit which will be known as the CITGO Arlington Heights Terminal. To facilitate this incorporation, tank number and equipment

designations for the equipment covered under this CAAPP permit have been changed as indicated in Attachment 5.

With the exception of the re-designation of equipment, indicated above, and the change in source wide throughput limits shown in Section 5.6, this permit incorporates by reference the information shown in the applications for the two previously issued CAAPP permits (i.e., CAAPP No. 95060051 and 95060124).

#### 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 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (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  |
| acfm            | Actual cubic feet per minute   |
| 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  |
| BOA             | Bureau of Air  |
| BOL             | Bureau of Land   |
| BOW             | Bureau of Water  |
| Btu             | British thermal unit   |
| 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  |
| DAPC            | Division of Air Pollution Control  |
| ERMS            | Emissions Reduction Market System  |
| °F              | Degrees Fahrenheit   |
| ft <sup>3</sup> | Cubic foot   |
| gal             | Gallon   |
| HAP             | Hazardous Air Pollutant  |
| hr              | hour   |
| 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   |
| °K              | degrees Kelvin   |
| kPa             | kiloPascals  |
| kW              | kilowatts  |
| LAER            | Lowest Achievable Emission Rate  |
| lb              | pound  |
| m <sup>3</sup>  | Cubic meters   |
| m               | meter  |
| MACT            | Maximum Achievable Control Technology  |
| mg              | Milligram  |
| mm              | Millimeter   |
| mmBtu           | Million British thermal units  |
| mo              | Month  |
| NESHAP          | National Emission Standards for Hazardous Air Pollutants   |
| NO <sub>x</sub> | Nitrogen Oxides  |
| NSPS            | New Source Performance Standards   |

|                   |  |
|-------------------|--|
| NSR               | New Source Review  |
| OM                | Organic Material   |
| PM                | Particulate Matter   |
| 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 |
| 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  |
| ppm               | parts per million  |
| PSD               | Prevention of Significant Deterioration  |
| psi               | Pounds per square inch   |
| psia              | Pounds per square inch absolute  |
| RMP               | Risk Management Plan   |
| SIC               | Standard Industrial Classification   |
| 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      |
| TANKS             | USEPA Emission Estimating Program for Storage Tanks  |
| TOC               | Total Organic Compounds  |
| USEPA             | United States Environmental Protection Agency  |
| VOC               | Volatile Organic Compounds   |
| VOL               | Volatile Organic Liquid  |
| VOM               | Volatile Organic Material  |
| VPL               | Volatile Petroleum Liquid  |
| VRU               | Vapor Recovery Unit  |
| wt.               | Weight   |
| yr                | year   |

### 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 2,000 gallon oil/water separator (East) having VOM emissions of less than 1.0 lb/hr and individual HAP emissions of less than 0.1 lb/hr;

One 2,000 gallon oil/water separator (West) having VOM emissions of less than 1.0 lb/hr and individual HAP emissions of less than 0.1 lb/hr;

One 1000 gallon vapor recovery knock-out tank (East) having VOM emissions of less than 1.0 lb/hr and individual HAP emissions of less than 0.1 lb/hr.

One 1000 gallon vapor recovery knock-out tank (West) having VOM emissions of less than 1.0 lb/hr and individual HAP emissions of less than 0.1 lb/hr;

Tank T120, (One) 10,000 gallon storage tank having VOM emissions of less than 1.0 lb/hr and individual HAP emissions of less than 0.1 lb/hr; and

Tank T130, (One) 12,500 gallon storage tank having VOM emissions of less than 1.0 lb/hr and individual HAP emissions of less than 0.1 lb/hr;

Tank T224, (One) 8,000 gallon storage tank having VOM emissions of less than 1.0 lb/hr and individual HAP emissions of less than 0.1 lb/hr; and

Tank T230, (One) 12,000 gallon storage tank having VOM emissions of less than 1.0 lb/hr and individual HAP emissions of less than 0.1 lb/hr.

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

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

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

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)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

- 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 storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70°F, the Permittee shall comply with the applicable requirements of 35 IAC 218.122, which requires use of a

permanent submerged loading pipe, submerged fill, or a vapor recovery system.

- 3.2.4 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.

### 3.3 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  | Emission Control Equipment  |
|------------------------------------|--|---|
| Group 1 Storage Tanks <sup>1</sup> | Fixed roof storage tanks with a capacity of less than 40,000 gallons, which store various organic liquids including ethanol with a true vapor pressure of less than 17.24 kPa (2.5 psia) | Permanent Submerged Fill  |
| Group 2 Storage Tanks <sup>1</sup> | Fixed Roof Storage Tanks With a Capacity Greater Than 40,000 Gallon  | Permanent Submerged Fill  |
| Group 3 Storage Tanks <sup>1</sup> | External floating roof storage tanks that require a rim-mounted secondary seal   | Floating Roof With Mechanical Shoe Primary Seal, Rim-Mounted Secondary Seal, Permanent Submerged Fill |
| Group 4 Storage Tanks <sup>1</sup> | Existing Floating Roof Storage Tanks.  | Floating Roof With Primary Seal and Permanent Submerged Fill  |
| Group 5 Storage Tanks <sup>1</sup> | New internal floating roof storage tanks   | Floating Roof and Permanent Submerged Fill  |
| Tank Truck Loading Rack            | (2) Four Bay Petroleum Product Truck Loading Racks   | Vapor Recovery Unit   |
| Fugitive Emissions                 | Piping, Valves, and Pumps Used to Transfer Materials Between the Pipe Line Storage Tanks and Loading/Unloading Rack  | None  |

<sup>1</sup> See Attachment 5 and Attachment 6, for more information regarding Tank designations, location and status

## 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), PM<sub>10</sub> (moderate nonattainment), and/or PM<sub>2.5</sub> and attainment or unclassifiable for all other criteria pollutants CO, lead, NO<sub>x</sub>, and SO<sub>2</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 Gasoline Volatility Standards

The Permittee shall comply with the standards for gasoline volatility 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 35 IAC 218.585(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. [35 IAC 218.585(a)]

- b. The Reid vapor pressure of gasoline, a measure of its volatility, shall not exceed 9.5 psi (65.5 kPa) during the regulatory control period in 1990 and each year thereafter. [35 IAC 218.585(b)]
- c. The Reid vapor pressure of ethanol blend gasolines shall not exceed the limitations for gasoline set forth in Condition 5.3.3(b), above, and 35 IAC 218.585(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. [35 IAC 218.585(c)]
- d. 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. [35 IAC 218.585(h)(1)]

#### 5.3.4 Ozone Depleting Substances

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

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

#### 5.3.5 Risk Management Plan (RMP)

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.

#### 5.3.6 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable regulations under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B that were promulgated after the date issued of this permit.
- c. This stationary source will be subject to 40 CFR 63, Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, Pipeline Facilities, and Gasoline Dispensing Facilities when such rule becomes final and effective. The Permittee shall comply with the applicable requirements of such regulation by the date(s) specified in such regulation and shall certify compliance with the applicable requirements of such regulation as part of the annual compliance certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required under a final and effective rule.

#### 5.3.7 Episode Action Plan

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

- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.
- c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.
- d. Any subsequent revisions of the plan shall also be sent to the Cook County Department of Environmental Control.

#### 5.4 Source-Wide Non-Applicability of Regulations of Concern

- 5.4.1 This source is not subject to 40 CFR 63, Subpart R, Y, and OOO because the aggregate actual HAP emissions from the source are less than 10 tons of each individual HAP and 25 tons for all HAPs. (See also Condition 5.6.2 and 5.6.3(a) and (b))
- 5.4.2 This source is not subject to 40 CFR 61, Subpart J because the pumps, compressors, pressure relief devices, sampling connections, systems, open-ended valves or lines, valves, flanges and other connectors, product accumulator vessels and storage tanks at the source are not in benzene service as defined in 40 CFR 61.111. (See also Condition 5.5.1)
- 5.4.3 This source is not subject to 40 CFR 61, Subpart V because pumps, compressors, pressure relief devices, sampling connections, systems, open-ended valves or lines, valves, flanges and other connectors, product accumulator vessels at the source are not in volatile hazardous air pollutant service as defined in 40 CFR 61.241. (See also Condition 5.5.1)
- 5.4.4 This source is not subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, because the source does not meet the applicability threshold quantity criteria shown in 40 CFR 68.10. (See also Condition 5.6.3)
- 5.4.5 This source is not subject to 35 IAC 212.302 through 212.216 and 35 IAC Part 212, Subpart U, because the source does not meet the applicability requirements shown in the respective sections.

#### 5.5 Source-Wide Control Requirements and Work Practices

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

- 5.5.1 The pumps, compressors, pressure relief devices, sampling connections, systems, open-ended valves or lines, valves, flanges and other connectors, product accumulator vessels and

storage tanks at the source shall not be used to process, store, unload or load any of the following:

A VOL containing vinyl chloride or benzene in excess of 2 percent by weight.

The Permittee has elected to establish these limits in order to demonstrate the non-applicability of the rules referenced in Condition 5.4.2 or 5.4.3.

5.5.2. Pursuant to the special permit shield provisions in Condition 5.13:

The Permittee shall inspect pumps and compressors for leaks on at least a monthly basis. If a significant leak is detected by any means, including visual observation, smell or sound, the pump or compressor shall be expeditiously repaired or taken out of service. For this purpose, action shall be considered expeditious if it occurs within 15 days.

5.5.3. Chemical Accident Prevention - 40 CFR Part 68

Pursuant to Condition 5.4.4, the Permittee shall not use or store a threshold quantity (See 40 CFR 68.115(a)) of a regulated substance listed in 40 CFR 68.130.

Pursuant to 40 CFR 68.115(b), regulated substances in gasoline, when in distribution or related storage for use as fuel for internal combustion engines, need not be considered when determining whether more than a threshold quantity is present at a stationary source. [40 CFR 68.115(b)(2)(ii)]

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)    | 183.96    |
| Sulfur Dioxide (SO <sub>2</sub> )  |           |
| Particulate Matter (PM)            |           |
| Nitrogen Oxides (NO <sub>x</sub> ) |           |
| HAP, not included in VOM or PM     |           |
| Total                              | 183.96    |

#### 5.6.2 Emissions of Hazardous Air Pollutants

The emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). This condition is being imposed so that the source is not a major source of HAP emissions. The Permittee shall fulfill the applicable testing, recordkeeping, and reporting requirements of Conditions 5.7.2, 5.9.7, and 5.10.3.

#### 5.6.3 Other Source-Wide Production and Emission Limitations

The Permittee shall not exceed the following source wide limits:

- a. The total HAP emissions from the affected source shall not exceed 80% of the major source threshold for individual or total HAPs (i.e., emissions greater than 8 tons of a single HAP or greater than 20 tons of total HAPs), pursuant to Sections 9.1(d) and 39 of the Act, this is to ensure that the source is not a major source for HAP subject to 40 CFR 63, Subpart R, National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations).
- b. In addition to Condition 5.3.2 and the source-wide emission limitations above the source is subject to the following:
  - i. This permit addresses the consolidation of two facilities, as the consolidation has consequences to the emission limits that have been established for these facilities, formerly known as the CITGO Mt. Prospect Terminal, ID# 031804AAM, and the CITGO Des Plaines Terminal ID#031804AAL, (which was previously owned by UNO-VEN). These two facilities will be consolidated into a single source called CITGO Arlington Heights Terminal under ID# 031804AAM [T1].
  - ii. This permit does not authorize any modifications of either existing facility as a result of the consolidation of activities [T1].
  - iii. This permit does not authorize any physical alterations to any emission units at either facility [T1].
  - iv. With the consolidation of the facilities, the throughput and emissions from the source shall not exceed the following limits; these limits address the new configuration of the source, and supersede the limits previously established for the separate facilities in the CAAPP permits for these facilities [T1].

- A. The throughput of gasoline by the source shall not exceed 625,000,000 gallons per year.
  - B. The VOM emissions from the source shall not exceed 207.39 tons/year.
- v. A. This permit does not authorize further modifications, i.e., an increase in throughput or emissions of any emission units constructed or modified after the effective date of non-attainment New Source Review (NSR), beyond those addressed by prior permits issued for these facilities [T1].
  - B. This permit is issued based on the existing emission units at the source, i.e., the units constructed prior to the effective date of non-attainment NSR not being modified beyond their physical and operational capacities, neither individually nor as part of a larger project [T1].
- vi. 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].
  - vii. The above limitations were established in Permit 05020060, 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].

## 5.7 Source-Wide Testing Requirements

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

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field

of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].

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

#### 5.7.2 HAP Testing to Verify Minor Source Status

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

- a. If in the previous calendar year, emissions of HAPs exceeded 80% of major source threshold for individual and total HAPs (greater than 8 tons of a single HAP and greater than 20 tons of total HAPs), then testing for HAPs using USEPA Method 311 shall be conducted as follows:
  - Test the material(s) that contribute to individual and total HAP emissions.
- b. Testing may be conducted by the supplier of the HAP-containing material.
- c. The calculation as to whether the 80% of major source threshold was exceeded shall be based on records and procedures in Condition 5.9.7 and 5.12 shall be completed by January 31 for the previous calendar year. If testing is required it shall be completed by March 15.
- d. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

#### 5.7.3 Gasoline Volatility Standards

The Permittee shall comply with the standards for gasoline volatility pursuant to 35 IAC 218.585.

- a. All sampling of gasoline required pursuant to the provisions of 35 IAC 218.585 shall be conducted by one or

more of the following approved methods or procedures which are incorporated by reference in 35 IAC 215.105 [35 IAC 218.585(d)].

- i. For manual sampling, ASTM D4057;
  - ii. For automatic sampling, ASTM D4177;
  - iii. Sampling procedures for Fuel Volatility, 40 CFR 80 Appendix D.
- b. 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 Ill. Adm. Code 218.112. For gasoline – oxygenate blends which contain water-extractable oxygenates, the Reid vapor pressure shall be measured using the dry method test [35 IAC 218.585(e)].
- c. 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 Ill. Adm. Code 218.112 [35 IAC 218.585(f)].
- d. Any alternate to the sampling or testing methods or procedures contained in 35 IAC 218.585(d), (e), and (f) must be approved by the Illinois EPA, 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 Illinois EPA approval of any alternate test procedure. If the Illinois EPA determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test methods or procedures, the Illinois EPA shall approve the proposed alternative [35 IAC 218.585(g)].

## 5.8 Source-Wide Monitoring Requirements

General monitoring requirements are not set for this source. However, there may be provisions for unit specific monitoring set forth in Section 7 of this permit.

## 5.9 Source-Wide Recordkeeping Requirements

### 5.9.1 Annual Emission Records

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

### 5.9.2 General Records for Storage Tanks

- a. Pursuant to Condition 5.11, the Permittee shall maintain a log identifying which unit-specific condition (Condition 7.1, 7.2, 7.3, 7.4 and 7.5 of this permit) each tank is complying with, if different than shown in Attachment 6, with date and supporting explanation for change in applicable requirements, pursuant to Section 39.5(7)(1)(i)(A) of the Act.
  - b. The Permittee shall maintain records of the following items for each storage tank at the source with a capacity of 40 m<sup>3</sup> (approximately 10,500 gallons) or greater [Section 39.5(7)(b) of the Act]. These records shall be kept up to date for each tank at the source and be retained until the tank is removed from the source.
    - i. The date\* on which construction of the tank was commenced, with a copy of supporting documentation;
    - ii. The date(s)\* on which modification or reconstruction, as defined in the NSPS, 40 CFR 60.14 and 60.15 respectively, were commenced on the tank, if applicable;
    - iii. A list of the types of VOL actually stored in the tank and anticipated to be stored in the tank, with date of each change in the list; and
    - iv. The dimensions of the tank and an analysis of capacity [35 IAC 218.129(f) and 40 CFR 60.116b(b)].
- \* If a date is prior to June 11, 1973, a specific date is not needed and documentation need only show commencement of construction prior to this date.

### 5.9.3 Records for Floating Roof Storage Tanks

The Permittee shall maintain records of the following items for each storage tank equipped with a floating roof to allow calculation of VOM and HAP emissions from the storage tanks at the source so as to demonstrate compliance with the annual emission limits in Condition 5.6. These records shall be updated whenever there is a change in status of a storage tank that is brought about by actions at the source, such as painting, and during periodic inspections.

- a. The color of each storage tank;
- b. The condition of each storage tank; and
- c. The type and number of fittings.

#### 5.9.4 Records for Operating Scenarios

If any storage tank identified in this permit as storing VPL changes to storage of materials with a vapor pressure of less than 0.5 psia at 70°F as provided for in Condition 5.11, the Permittee shall maintain a log identifying the liquid stored in the tank, the date such tank switched to the storage of this liquid, and if applicable, the date such tank returned to storage of VPL.

#### 5.9.5 Records for Pump and Compressor Inspections

The Permittee shall keep the following records to document implementation of the leak detection and repair program required by Condition 5.5.2.

- a. The performance of an inspection or other observation identifying a leaking component, including, date, the individual that performed the inspection, and the type of inspection;
- b. The condition, i.e., idle or operational, of each pump or compressor inspected;
- c. The presence of a leak, with description and the means of identification;
- d. The date the leak was repaired, or the component taken out of service; and
- e. If a corrective action, as in Condition 5.5.2, was not taken within 15 days, an explanation why corrective action could not be taken in 15 days.

#### 5.9.6 Gasoline Volatility Standards

The Permittee shall maintain records of the following items for gasoline and ethanol blends leaving the source for use in Illinois [35 IAC 218.585(h)(2)]:

- a. Reid vapor pressure of each gasoline or ethanol blend shipment;
- b. Quantity of each gasoline or ethanol blend shipment; and
- c. Date of delivery of each shipment.

#### 5.9.7 Records for VOM and HAP Emissions and Other Compliance Records

The Permittee shall maintain records of the following items to allow verification that the source is not a major source for HAP emissions and therefore not subject to 40 CFR 63 Subpart R and to quantify annual VOM emissions, so as to demonstrate compliance with the limits in Condition 5.6:

- 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 5.9.7(c) below.
- c. The Permittee shall keep an MSDS or equivalent document showing the formulation of each gasoline or gasoline blend, including content of all HAPs. These formulation sheets may be used to make the calculation of HAP emissions required by Condition 5.7.2. If the formulation sheet uses a maximum or range value (e.g., less than 1% or range of 2 - 3%) then the highest value shall be used.
- d. The Permittee shall maintain the following general records:
  - i. The identification and properties of each organic liquid stored at the source, as related to emissions, i.e., vapor pressure and molecular weight;
  - ii. The vapor weight percent of each HAP in the organic material emissions for each liquid determined as the average over the annual range of storage temperature and representative data on the composition of the liquid, with identification of supporting documentation, e.g., USEPA 1992 survey;
  - iii. A copy of the supporting documentation for HAP vapor weight percent; and
  - iv. A current analysis of the tank or tanks in each group that would have the greatest emissions from storage of various liquids in the event that the Permittee does not choose to keep throughput records by individual tank, to identify the tank that should be assumed for emission calculations.
- e. The Permittee shall maintain records of the following items on a monthly basis for the previous month:
  - i. The throughputs of each organic liquid through each tank or group of tanks and loading rack;
  - ii. The organic material (OM) emissions attributable to each organic liquid stored at the source, tons/month, with supporting calculations, calculated utilizing an

approved USEPA methodology, such as the TANKS program;

- iii. For each HAP identified as present, the total emissions of the individual HAP for all emission units at the source, tons/month, with supporting calculations; and
- iv. Total emissions of each individual HAP, and combined HAPs from the source, tons/month, with supporting calculations.

#### 5.9.8 Retention and Availability of Records

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

### 5.10 Source-Wide Reporting Requirements

#### 5.10.1 General Source-Wide Reporting Requirements

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

#### 5.10.2 Annual Emissions Report

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

#### 5.10.3 Annual Reporting of HAP

The Permittee shall submit an annual report to the Illinois EPA, Compliance Section, on HAP emissions from the source, including the following information, so as to demonstrate whether the source is being operated as a non-major source of HAP emissions.

This report shall be submitted with the Annual Emissions Report (Condition 9.7).

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

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

5.11.1 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 General Procedures for Calculating Emissions

Compliance with the source-wide 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) of this permit.

- a. For the purpose of estimating VOM emissions from the storage tanks, the most current version of the TANKS program is acceptable.
- b. For the purpose of estimating fugitive VOM emissions from components at the facility, the emission factors found in "Marketing Terminal Emission Factors" published by USEPA on the Technology Transfer Network bulletin board in February, 1995 or the best available emission factors, including factors developed by the source, are acceptable.
- c. For the purpose of estimating HAP emissions from equipment at the facility, the vapor weight percent (based on a 1992 USEPA survey or based upon data developed by the Permittee) of each HAP for each product times the VOM emissions contributed by that product is acceptable.
- d. Total VOM and HAP emissions at the source shall be determined as the sum of the respective VOM and HAP emissions from the affected storage tanks (Conditions 7.1 through 7.5), loading racks (Condition 7.6) and fugitives (Condition 7.7).

## 5.13 Special Permit Shield

The Permittee is hereby shielded from any obligation to measure the volume of leaking liquid from a pump or compressor for purposes of determining compliance with 35 IAC 218.142 as Condition 5.5.2 establishes appropriate compliance procedures for this rule that do not rely on such measurements.

## 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 505 ATUs per seasonal allotment period.
  - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 57.32 tons per season.
  - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.1.10 of this permit.
  - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.
  - v. Condition 6.1.3(a) becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.
- b. Contingent Allotments for New or Modified Emission Units  
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 Group 1 Storage Tanks

Fixed roof storage tanks with a capacity of less than 40,000 gallons, which store various organic liquids including ethanol with a true vapor pressure of less than 15.0 kPa (2.1 psia).

7.1.1 Descriptions

The Permittee operates fixed roof storage tanks with a capacity of less than 40,000 gallons, which store various organic liquids including ethanol with a true vapor pressure of less than 15.0 kPa (2.1 psia). Permanent submerged loading is used on the tanks in order to minimize turbulence and evaporation of VOM during loading.

7.1.2 List of Emission Equipment and Pollution Control Equipment

West Unit

| Storage Tank | Description     | Emission Control Equipment       |
|--------------|-----------------|----------------------------------|
| T110         | Fixed Roof Tank | Permanent Submerged Loading Pipe |
| T111         | Fixed Roof Tank | Permanent Submerged Loading Pipe |
| T112         | Fixed Roof Tank | Permanent Submerged Loading Pipe |

East Unit

| Storage Tank | Description     | Emission Control Equipment       |
|--------------|-----------------|----------------------------------|
| T221         | Fixed Roof Tank | Permanent Submerged Loading Pipe |

See Attachment 5 and Attachment 6, for more information regarding Tank designations, location and status.

7.1.3 Applicable Provisions and Regulations

- a. The "affected tank" for the purpose of these unit-specific conditions, is a tank described in Conditions 7.1.1 and 7.1.2.
- b. Pursuant to 35 IAC 218.119(g), affected tank(s) with storage capacity less than 40,000 gallons shall comply with the requirements 35 IAC 218.129(f), which requires that the Permittee maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. (See Condition 7.1.9). [35 IAC 218.129(f)]

The status of all storage tanks at this source, including affected tanks, is summarized in Attachment 5 and Attachment 6.

#### 7.1.4 Non-Applicability of Regulations of Concern

- a. The affected tanks are not subject to 35 IAC 218.120, 218.121 and 218.123 because the tank capacities are less than 40,000 gallons [35 IAC 218.119(g), 218.121 and 218.123(a)(2)].
- b. The affected tanks are not subject to 35 IAC 218.122(b) because no odor nuisance exists and the tanks are used to store organic liquid with a maximum true vapor pressure of less than 17.24 kPa (2.5 psia) at 294.3°K (70°F) [218.122(c)].
- c. The affected tanks are not subject to the requirements of 35 IAC Part 218, Subpart QQ or TT, because the affected tanks are subject to 35 IAC 218, Subpart B [35 IAC 218.940(a) and (b) and 218.980(a) and (b)].
- d. The affected tanks are not subject to the requirements of 40 CFR 60 Subparts K, Ka, or Kb, because the tanks were constructed prior to the applicability dates of each NSPS [40 CFR 60.110(a), 60.110a(a), and 60.110b(a)].
- e. The affected emission units are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tanks do not use an add-on control device to achieve compliance with an emission limitation or standard.

#### 7.1.5 Control Requirements and Work Practices

Control requirements are not set for the affected tanks. However, there may be requirements for source-wide control requirements set forth in Condition 5.5.

#### 7.1.6 Production and Emission Limitations

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

- a. The Permittee shall not store any organic material with a true vapor pressure of 15 kPa (2.1 psia) or greater in each affected storage tank.
- b. Operation of the affected emission units, Storage Tanks T110, T111, and T112 shall not exceed the following limits:
  - i. The affected emission units shall only store ethanol.
  - ii. Ethanol throughput through the affected storage tanks T110, T111, and T112 shall not exceed

(gallons/month)                      (gallons/year)

6,250,000                                  50,000,000

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].

The above limitations were established in Permit 95060051, 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].

- vi. Emissions from the affected emission units, Storage Tanks T110, T111, and T112 shall not exceed the following limits:

| <u>(Tons/Month)</u> | VOM | <u>(Tons/Year)</u> |
|---------------------|-----|--------------------|
| 0.59                |     | 3.16               |

These limits are based on the operational limits referenced in Condition 7.1.6(a) and (c) and the compliance procedures referenced in Condition 7.1.12.

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) [T1R].

The above limitations were established in Permit 95060051, 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. In addition, the above limitations contain revisions to previously issued Permit 95060051, as reflected in this Title V permit issued on November 9, 1999. Specifically, the Permittee has requested an increase in the monthly emissions limitations in order to correct the previous emissions limit which did not account for the increase in emissions experienced due to an increase in typical seasonal temperatures [T1R].

7.1.7 Testing Requirements

Testing requirements are not set for the affected tanks. However, there are general testing requirements in Conditions 5.7 and 8.5.

7.1.8 Monitoring Requirements

Monitoring requirements are not set for the affected tanks. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected tank to demonstrate compliance with Conditions 5.6.1 and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. The storage of any organic liquid with a true vapor pressure greater than 15 kPa (2.1 psia).
- b. The VOM emissions attributable to the affected emission units, Storage Tanks T110, T111, T112 and T221, with calculations; tons/month.
- c. Ethanol liquids throughput through each affected emission units, Storage Tanks T110, T111, T112 and T221; gallons/month.

The records required by Condition 5.9.2(b) (requiring records of tank dimensions and an analysis of the capacity of the storage vessel) are acceptable pursuant to the requirements of 35 IAC 218.129(f).

7.1.10 Reporting Requirements

- a. 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:
  - i. Any storage of organic liquid with a true vapor pressure greater than 15 kPa (2.1 psia) in each affected storage tank within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.

- ii. Any exceedance of the emission and operational limits shown in Conditions 7.1.6.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tank 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:

Changes in the material stored in a tank, provided the tank continues to comply with the Conditions in Section 7.1 of this permit.

7.1.12 Compliance Procedures

- a. Emissions from each affected storage tank shall be determined through the use of the TANKS program.
- b. For the purpose of estimating HAP emissions from the tanks, the vapor wt percent (based on a 1992 USEPA survey) of each HAP for each product times the VOM emissions contributed by that product shall be used (e.g., hexane represents 1.4% by weight of the VOM in gasoline) and calculating individual HAP emissions as in (a) above. Total monthly HAP emissions will be based on the sum of emissions of all individual HAP.

7.2 Group 2 Storage Tanks

Fixed Roof Storage Tanks With a Capacity Greater Than 40,000 Gallons

7.2.1 Descriptions

The Permittee operates a fixed roof storage tanks used to store distillate fuels. Permanent submerged loading is used on the tanks in order to minimize turbulence and evaporation of VOM during loading.

7.2.2 List of Emission Equipment and Pollution Control Equipment

West Unit

| Storage Tank | Description     | Emission Control Equipment       |
|--------------|-----------------|----------------------------------|
| T106         | Fixed Roof Tank | Permanent Submerged Loading Pipe |

East Unit

|      |                 |                                  |
|------|-----------------|----------------------------------|
| T201 | Fixed Roof Tank | Permanent Submerged Loading Pipe |
| T203 | Fixed Roof Tank | Permanent Submerged Loading Pipe |

Tank T203 was converted from a floating roof tank to a fixed roof tank through the removal of the internal floating roof.

See Attachment 5 and Attachment 6, for more information regarding Tank designations, location and status.

7.2.3 Applicable Provisions and Regulations

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

The status of all storage tanks at this source, including affected tanks, is summarized in Attachment 5 and Attachment 6.

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected tanks are not subject to the New Source Performance Standards (NSPS) in 40 CFR Part 60, Subpart Subparts K, Ka or Kb, because the affected tanks meet the exclusions and or exemptions stipulated in 40 CFR 60.110, 60.110a, and 60.110b, respectively.

It should be noted that this CAAPP permit differs from the initially issued CAAPP permit in that Tank T106 is no longer subject to the requirements of 40 CFR 60 Subpart Kb [40 CFR 60.110b(a)]. 40 CFR 60 Subpart Kb does not apply to storage vessels with a capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater

than or equal to 75 m<sup>3</sup> but less than 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 15.0 kPa [40 CFR 60.110b(b) revised at 68 FR 59333, Oct. 15, 2003].

- b. The affected tanks are not subject to the limitations of 35 IAC 218.120, Control Requirements for Storage Containers of VOL, because the vapor pressure of VOLs stored in the tank is less than 0.75 psia (See Condition 7.2.6). [35 IAC 218.120(a)]
- c. The affected tanks are not subject to the requirements of 35 IAC 218.121, Storage Containers of VPL, or 35 IAC 218.123, Petroleum Liquid Storage Tanks, because the vapor pressure of VOLs stored in the tank is less than 0.75 psia (See Condition 7.2.6). Therefore, the petroleum liquids stored in the tanks do not meet the definition for volatile petroleum liquid [35 IAC 218.121 and 123].

"Volatile petroleum liquid" means any petroleum liquid with a true vapor pressure that is greater than 1.5 psia (78 millimeters of mercury) at standard conditions [35 IAC 211.7170].

- d. The affected tanks are not subject to the requirements of 35 IAC 218.122, Loading Operations, if no odor nuisance exists the limitations of 35 IAC 218.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) [35 IAC 218.122(c)].
- e. The affected tanks are not subject to the requirements of 35 IAC Part 218, Subpart QQ or TT, because the affected tank is subject to 35 IAC 218, Subpart B [35 IAC 218.940(a) and (b) and 218.980(a) and (b)].
- f. The affected emission units are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tanks do not use an add-on control device to achieve compliance with an emission limitation or standard.

#### 7.2.5 Control Requirements and Work Practices

Control requirements are not set for the affected tanks. However, there may be requirements for source-wide control requirements set forth in Condition 5.5.

#### 7.2.6 Production and Emission Limitations

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

- a. The Permittee shall not store any organic material with a true vapor pressure of 0.75 psia or greater.
- b. i. Emissions from Storage Tank T106 shall not exceed the following limits:

| <u>(Tons/Month)</u> | VOM | <u>(Tons/Year)</u> |
|---------------------|-----|--------------------|
| 0.25                |     | 1.518              |

These limits are based on the operational limits referenced in Condition 7.2.6(b) and (c) and the compliance procedures referenced in Condition 7.2.12.

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) [T1R].

The above limitations were established in Permit 95060051, 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. In addition, the above limitations contain revisions to previously issued Permit 95060051, as reflected in this Title V permit issued on November 9, 1999. Specifically, the Permittee has requested an increase in the monthly emissions limitations in order to correct the previous emissions limit which did not account for the increase in emissions experienced due to an increase in typical seasonal temperatures [T1R].

- ii. Operation of Storage Tank T106 shall not exceed the following limits:

| <u>Distillate Fuels Throughput</u><br><u>(gallons/month)</u> | <u>(gallons/year)</u> |
|--|-----------------------|
| 22,268,446   | 222,684,462           |

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].

The above limitations were established in Permit 95060051, 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. In addition, the above limitations contain revisions to previously issued Permit 95060051, as reflected in this Title V permit issued on November 9, 1999. Specifically, pursuant to Construction Permit 88050059, there were no previous limitations on distillate fuel throughput [T1].

7.2.7 Testing Requirements

Testing requirements are not set for the affected tanks. However, there are general testing requirements in Conditions 5.7 and 8.5.

7.2.8 Monitoring Requirements

Monitoring requirements are not set for the affected tanks. However, there may be provisions for source-wide monitoring requirements set forth in Condition 5.8 of this permit.

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

- a. The storage of any organic liquid with a true vapor pressure greater than 0.5 psia.
- b. Distillate fuel throughput through each affected emission units; gallons/month [T1].
- c. The VOM emissions attributable to each affected emission unit, with calculations; tons/month [T1].

7.2.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected tank with the permit requirements, 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. Any storage of organic liquid with a true vapor pressure greater than 0.5 psia in an affected tank within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.

- ii. Any exceedance of the emission and operational limits shown in Conditions 7.2.6.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tank 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:

Changes in the material stored in a tank, provided the tank continues to comply with the Conditions in Section 7.2 of this permit.

7.2.12 Compliance Procedures

- a. Emissions from each affected storage tank shall be determined through the use of the TANKS program.
- b. For the purpose of estimating HAP emissions from the tanks, the vapor wt percent (based on a 1992 USEPA survey) of each HAP for each product times the VOM emissions contributed by that product shall be used (e.g., hexane represents 1.4% by weight of the VOM in gasoline) and calculating individual HAP emissions as in (a) above. Total monthly HAP emissions will be based on the sum of the emissions for each individual HAP.

7.3 Group 3 Storage Tanks

External floating roof storage tanks that require a rim-mounted secondary seal

7.3.1 Description

The Permittee operates external floating roof storage tanks that are required to have a rim mounted secondary seal to store various petroleum products. Permanent submerged loading must be used at these tanks, minimizing turbulence and evaporation of VOM during loading.

7.3.2 List of Emission Equipment and Pollution Control Equipment

East Unit

| Storage Tank | Description                 | Emission Control Equipment   |
|--------------|-----------------------------|--|
| T204         | External Floating Roof Tank | Floating Roof, Mechanical Primary Seal, Rim-Mounted Secondary Seal, and a Permanent Submerged Loading Pipe |
| T205         | External Floating Roof Tank | Floating Roof, Mechanical Primary Seal, Rim-Mounted Secondary Seal, and a Permanent Submerged Loading Pipe |

7.3.3 Applicable Provisions and Regulations

- a. The "affected tank" for the purpose of these unit-specific conditions, is a tank described in Conditions 7.3.1 and 7.3.2.
- b. An "affected tank," for the purposes of these unit-specific conditions, is a storage tank that is only subject to the requirements of 35 IAC 218.121, 218.122(b), 218.123, and 218.124. Each storage tank with a capacity of 151.42 cubic meters (approx. 40,000 gallons) or more, storing volatile petroleum liquid (VPL), equipped with an external floating roof is subject to the requirements of 35 IAC 218.124(a) unless it is exempted pursuant to 35 IAC 218.124(b). A tank may be permanently exempt based on applicability of a NSPS. A tank also may be exempt due to the current service, features, or other circumstances associated with the tank. A tank must comply with other rules if the vapor pressure of the VPL is 86.19 kPa (12.5 psia) or greater at 294.3°K (70°F).
- c. Each affected tank shall be operated so that the floating roof including the seal closure devices meet each of the following requirements:
  - i. There shall be no visible holes, tears, or other defects in the seal or any seal fabric or material of the floating roof [35 IAC 218.123(b)(2)];

- ii. The seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and tank wall [35 IAC 218.124(a)(2)(A)];
- iii. The accumulated area of gaps exceeding 0.32 centimeter (1/8 inch) in width between the secondary seal and the tank wall shall not exceed 21.2 square centimeters per meter of tank diameter (1.0 square inch per foot of tank diameter) [35 IAC 218.124(a)(2)(B)]; and
- iv. The covers, lids or seals on openings of the floating roof deck other than stub drains shall be operated such that the following requirements are met:
  - A. The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank [35 IAC 218.123(b)(3)(A)];
  - B. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports [35 IAC 218.123(b)(3)(B)]; and
  - C. 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 [35 IAC 218.123(b)(3)(C)].
- d. No person shall cause or allow the emissions of air contaminants into the atmosphere from any gauging or sampling devices attached to an affected tank, except during sampling or maintenance operations [35 IAC 218.121(b)(1)].

The status of all storage tanks at this source, including affected tanks, is summarized in Attachment 5 and Attachment 6.

#### 7.3.4 Non-Applicability of Regulations of Concern

- a. The affected tanks are not subject to the requirements of 35 IAC 218.120 because the tanks are used solely for the storage of petroleum liquids [35 IAC 218.119(e)].
- b. The affected tanks are not subject to the requirements of 40 CFR 60 Subparts K, Ka, or Kb, because the tanks were constructed prior to the applicability dates of each NSPS [40 CFR 60.110(a), 60.110a(a), and 60.110b(a)].
- c. The affected tanks are not subject to the requirements of 35 IAC Part 218, Subpart QQ or TT, because the affected

tank is subject to 35 IAC 218, Subpart B [35 IAC 218.940(a) and (b) and 218.980(a) and (b)].

- d. The affected emission units are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tanks do not use an add-on control device to achieve compliance with an emission limitation or standard.

#### 7.3.5 Control Requirements and Work Practices

Each affected tank shall be equipped with the following:

- a. A floating roof which rests on the surface of the VOL that is equipped with a primary seal [35 IAC 218.121(b)(1)];
- b. A floating roof that is equipped with a continuous seal extending from the floating roof to the tank wall (rim mounted secondary seal) [35 IAC 218.124(a)(1)]. (The Illinois EPA has not approved use of other equivalent equipment in lieu of a rim mounted secondary seal.);
- c. All drains (for drainage of rainwater, also know as "stub drains") in the floating roof deck shall be provided with slotted membrane fabric covers or equivalent covers across at least 90 percent of the area of the opening [35 IAC 218.124(a)(3)];
- d. All openings of the floating roof deck, other than drains, shall be equipped with projections into the tank which remain below the liquid surface at all times except when supported on the roof legs and be equipped with covers, lids or seals [35 IAC 218.123(b)(3) and 218.124(a)(4)]; and
- e. A permanent submerged loading pipe [35 IAC 218.122(b)].

#### 7.3.6 Production and Emission Limitations

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

#### 7.3.7 Testing Requirements

Testing requirements are not set for the affected tanks. However, there are general testing requirements in Conditions 5.7 and 8.5.

#### 7.3.8 Monitoring Requirements

- a. The Permittee shall inspect each affected tank semiannually, the first inspection being prior to May 1 of each year, to insure compliance with the applicable control

and operating requirements [35 IAC 218.123(b)(4) and 218.124(a)(5)].

- b. i. The Permittee shall measure the secondary seal gap of each affected tank prior to May 1 of each year and within 30 days of a written request. This measurement shall be conducted in accordance with the methods and procedures specified in 40 CFR 60, Subpart Kb [35 IAC 218.124(a)(6)].
- ii. Prior notification for the above measurements shall be given to the Illinois EPA as specified in Condition 7.3.10(b).
- c. The Permittee shall perform a complete inspection of the cover and seals of each affected tank whenever the tank is emptied for any reasons other than the transfer of 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 [35 IAC 218.123(b)(5)].

#### 7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected tank to demonstrate compliance with Conditions 5.6.1 7.3.3, 7.3.5 and 7.3.8, pursuant to Section 39.5(7)(b) of the Act:

- a. In addition to the records required by Condition 5.9 (requiring records of throughput and emissions), the Permittee shall maintain records of the following items for each affected tank, pursuant to 35 IAC 218.123(b)(6) and 218.124(a)(7):
  - i. A list of the types of volatile petroleum liquid stored on a monthly basis;
  - ii. The maximum true vapor pressure of each type of liquid as stored, psia;
  - iii. The results of any inspections or measurements required by the Condition 7.3.8(a), (b) and/or (c), including:
    - A. Type of inspection;
    - B. When the inspection and/or measurement was performed;
    - C. Who performed the inspection and/or measurement;

- D. The method of inspection and/or measurement;
  - E. The observed condition of each feature of the external floating roof (seals, roof deck and fittings) with raw data recorded during the inspection and/or measurement; and
  - F. Summary of compliance.
- b. The Permittee shall maintain records of the following for each affected tank to demonstrate compliance with Condition 7.3.8(c) (Cover and Seal Inspection) [35 IAC 218.123(b)(6)]:

Records that are sufficient to identify whenever the tank is emptied for any reason other than the transfer of liquid during normal operation or whenever repairs are made as a result of regular inspections or incident of roof damage or defect.

#### 7.3.10 Reporting Requirements

- a. The Permittee shall notify the Illinois EPA, Compliance Section and Regional Field Office, at least 30 days before the planned performance of seal gap measurements, pursuant to Section 39.5(7)(f) of the Act, so the Illinois EPA may observe the measurements.
- b. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected tank with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - i. Any storage of VPL in an affected tank that is not in compliance with the control requirements (due to absence of the features required by Condition 7.3.5, e.g., "no rim-mounted secondary seal,") within 5 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.
  - ii. Any storage of VPL in an affected tank that is out of compliance with the control requirements (Condition 7.3.5) due to damage, deterioration, or other condition of the tank, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

#### 7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tank 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 in the material stored in a tank, provided the tank continues to comply with the Conditions in Section 7.3 of this permit.
- b. Changes accounted for in Condition 5.11.

#### 7.3.12 Compliance Procedures

- a. Emissions from each affected storage tank shall be determined through the use of the TANKS program.
- b. For the purpose of estimating HAP emissions from the tanks, the vapor wt percent (based on a 1992 USEPA survey) of each HAP for each product times the VOM emissions contributed by that product shall be used (e.g., hexane represents 1.4% by weight of the VOM in gasoline) and calculating individual HAP emissions as in (a) above. Total monthly HAP emissions will be based on the sum of the emissions for each individual HAP.
- c. Compliance with Condition 7.3.3(c) shall be based inspections and measurements, recordkeeping and reporting requirements in Conditions 7.3.8, 7.3.9, and 7.2.10.

7.4 Group 4 Storage Tanks

Existing Floating Roof Storage Tanks

7.4.1 Description

The Permittee operates internal floating roof storage tanks to store various petroleum products. Permanent submerged loading must be used at these tanks, minimizing turbulence and evaporation of VOM during loading.

7.4.2 List of Emission Units and Air Pollution Control Equipment

West Unit

| Storage Tank | Description                 | Emission Control Equipment  |
|--------------|-----------------------------|---|
| T101         | Internal Floating Roof Tank | Floating Roof, Liquid - Mounted Resilient Primary Seal, Rim-Mounted Secondary Seal, and a Permanent Submerged Loading Pipe <sup>1</sup> |
| T102         | Internal Floating Roof Tank | Floating Roof, Mechanical Shoe Seal, and a Permanent Submerged Loading Pipe <sup>1</sup>  |
| T103         | Internal Floating Roof Tank | Permanent Submerged Loading Pipe and Internal Floating Roof   |
| T104         | Internal Floating Roof Tank | Permanent Submerged Loading Pipe and Internal Floating Roof   |
| T105         | Internal Floating Roof Tank | Floating Roof, Mechanical Shoe Seal, and a Permanent Submerged Loading Pipe   |

East Unit

|      |                             |   |
|------|-----------------------------|---|
| T202 | Internal Floating Roof Tank | Floating Roof, Mechanical Shoe Seal, and a Permanent Submerged Loading Pipe |
|------|-----------------------------|---|

<sup>1</sup> The emission unit was converted from an external floating roof tank to an internal floating roof tank through the addition of a geodesic dome

See Attachment 5 and Attachment 6, for more information regarding Tank designations, location and status.

7.4.3 Applicable Provisions and Regulations

- a. The "affected tanks" for the purpose of these unit-specific conditions, are the tanks described in Conditions 7.4.1 and 7.4.2.
- b. An "affected tank," for the purposes of these unit-specific conditions, is a storage tank that is subject to the requirements of 35 IAC 218.121, 218.122(b), and 218.123.

Each storage tank with a capacity of 151.42 cubic meters (approx. 40,000 gallons) or more, storing volatile petroleum liquid (VPL), is subject to the requirements of 35 IAC 218.123(b) unless it is specifically excluded pursuant to 35 IAC 218.123(a). A tank may be permanently exempt based on applicability of a NSPS. A tank also may be exempt due to the current service, features, or other circumstances associated with the tank. A tank must comply with other rules if the vapor pressure of the VPL is 86.19 kPa (12.5 psia) or greater at 294.3°K (70°F).

- c. Each affected tank shall be operated so that the floating roof including the seal closure devices meet each of the following requirements:
  - i. There shall be no visible holes, tears, or other defects in the seal or any seal fabric or material of the floating roof [35 IAC 218.123(b)(2)];
  - ii. The covers, lids or seals on openings of the floating roof deck other than stub drains shall be operated such that the following requirements are met:
    - A. The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank [35 IAC 218.123(b)(3)(A)];
    - B. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports [35 IAC 218.123(b)(3)(B)]; and
    - C. 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 [35 IAC 218.123(b)(3)(C)].
- d. No person shall cause or allow the emissions of air contaminants into the atmosphere from any gauging or sampling devices attached to an affected tank, except during sampling or maintenance operations [35 IAC 218.121(b)(1)].

See Attachment 5 and Attachment 6, for more information regarding Tank designations, location and status.

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

- a. The affected tanks are not subject to the requirements of 35 IAC 218.120 because the tanks are used solely for the storage of petroleum liquids [35 IAC 218.119(e)].

- b. The affected tanks are not subject to the requirements of 40 CFR 60 Subparts K, Ka, or Kb, because the tanks were constructed prior to the applicability dates of each NSPS [40 CFR 60.110(a), 60.110a(a), and 60.110b(a)].

Note the conversion Tanks T101 and T102 from a external floating roof tank to a internal floating roof tank through the addition of a geodesic dome does not constitute a modification since there is no increase in emissions of any criteria air pollutant, in accordance with 40 CFR 60.2 and 35 IAC 201.102.

- c. The affected tanks are not subject to the requirements of 35 IAC Part 218, Subpart QQ or TT, because the affected tank is subject to 35 IAC 218, Subpart B [35 IAC 218.940(a) and (b) and 218.980(a) and (b)].
- d. The affected emission units are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tanks do not use an add-on control device to achieve compliance with an emission limitation or standard.

#### 7.4.5 Control Requirements and Work Practices

Each affected tank shall be equipped with the following:

- a. A floating roof which rests on the surface of the VOL that is equipped with a primary seal [35 IAC 218.121(b)(1)];
- b. All openings of the floating roof deck, other than drains, shall be equipped with covers, lids or seals [35 IAC 218.123(b)(3)]; and
- c. A permanent submerged loading pipe [35 IAC 218.122(b)].

#### 7.4.6 Production and Emission Limitations

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

#### 7.4.7 Testing Requirements

Testing requirements are not set for the affected tanks. However, there are general testing requirements in Conditions 5.7 and 8.5.

#### 7.4.8 Monitoring Requirements

- a. The Permittee shall inspect the floating roof seals of each affected tank semiannually, the first inspection being prior to May 1 of each year, to insure compliance with the

applicable control and operating requirements [35 IAC 218.123(b)(4)].

- b. The Permittee shall perform a complete inspection of the cover and seals of each affected tank whenever the tank is emptied for any reasons other than the transfer of 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 [35 IAC 218.123(b)(5)].

#### 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 each affected tank to demonstrate compliance with Conditions 5.6.1, 7.4.3, 7.4.5, and 7.4.8, pursuant to Section 39.5(7)(b) of the Act:

- a. In addition to the records required by Condition 5.6 (requiring records of throughput and emissions), the Permittee shall maintain records of the following items for each affected tank, pursuant to 35 IAC 218.123(b)(6):
  - i. A list of the types of volatile petroleum liquid stored on a monthly basis;
  - ii. The maximum true vapor pressure of each type of liquid as stored, psia; and
  - iii. The results of any inspections or measurements required by the Condition 7.4.8(a) and/or (b), including:
    - A. Type of inspection;
    - B. When the inspection and/or measurement was performed;
    - C. Who performed the inspection and/or measurement;
    - D. The method of inspection and/or measurement;
    - E. The observed condition of each feature of the external floating roof (seals, roof deck and fittings) with raw data recorded during the inspection and/or measurement; and
    - F. Summary of compliance.
- b. The Permittee shall maintain records of the following for each affected tank to demonstrate compliance with Condition

7.4.8(b) (Cover and Seal Inspection) [35 IAC 218.123(b)(6)]:

Records that are sufficient to identify whenever the tank is emptied for any reason other than the transfer of liquid during normal operation or whenever repairs are made as a result of regular inspections or incident of roof damage or defect.

7.4.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected tank with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - i. Any storage of VPL in an affected tank that is not in compliance with the control requirements (due to absence of the features required by Condition 7.4.5, e.g., "no permanent submerged loading pipe," within 5 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.
  - ii. Any storage of VPL in an affected tank that is out of compliance with the control requirements (Condition 7.4.5) due to damage, deterioration, or other condition of the tank, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tank 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 in the material stored in a tank, provided the tank continues to comply with the Conditions in Section 7.4 of this permit.
- b. Changes accounted for in Condition 5.11.

#### 7.4.12 Compliance Procedures

- a. Emissions from each affected storage tank shall be determined through the use of the TANKS program.
- b. For the purpose of estimating HAP emissions from the tanks, the vapor wt percent (based on a 1992 USEPA survey) of each HAP for each product times the VOM emissions contributed by that product shall be used (e.g., hexane represents 1.4% by weight of the VOM in gasoline) and calculating individual HAP emissions as in (a) above. Total monthly HAP emissions will be based on the sum of the emissions for each individual HAP.

7.5 Group 5 Storage Tanks

New internal floating roof storage tanks

7.5.1 Description

The Permittee operates new internal floating roof storage tank(s) to store gasoline and ethanol. Permanent submerged loading must be used at these tanks, minimizing turbulence and evaporation of VOM during loading.

7.5.2 List Of Emission Equipment And Pollution Control Equipment

West Unit

| Storage Tank | Description                     | Emission Control Equipment   | Material Stored |
|--------------|---------------------------------|--|-----------------|
| T107         | New Internal Floating Roof Tank | Permanent Submerged Loading Pipe and Internal Floating Roof With Primary and Secondary Seals | Gasoline        |

East Unit

|      |                                 |   |         |
|------|---------------------------------|---|---------|
| T210 | New Internal Floating Roof Tank | Permanent Submerged Loading Pipe and Internal Floating Roof With Mechanical Shoe Seal | Ethanol |
|------|---------------------------------|---|---------|

See Attachment 5 and Attachment 6, for more information regarding Tank designations, location and status.

7.5.3 Applicable Provisions and Regulations

- a. The "affected tanks" for the purpose of these unit-specific conditions, are the tanks described in Conditions 7.5.1 and 7.5.2.
- b. An "affected tank," for the purposes of these unit specific conditions is a storage tank that is subject to the control requirement of 40 CFR 60 Subpart Kb and 35 IAC 218.122(b) that relies on an internal floating roof and a permanent submerged loading pipe for compliance, respectively.

The affected facility to which 40 CFR 60 Subpart Kb applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m<sup>3</sup>) (20,000 gallons) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984 [40 CFR 60.110b(a)].

- c. Each storage tank subject to 40 CFR 60 Subpart Kb is hereby shielded from compliance with 35 IAC 218.120, 218.121, and 218.123. This shield is issued to streamline the

applicable requirements for the source, based on the Illinois EPA's finding that compliance with 40 CFR 60, Subpart Kb assures compliance with 35 IAC 218.120, 218.121, and 218.123, following the review requirements of 40 CFR 60 Subpart Kb and 35 IAC 218.120, 218.121, and 218.123.

#### 7.5.4 Non-Applicability of Regulations of Concern

- a. The affected tanks are not subject to the requirements of 35 IAC Part 218, Subpart QQ or TT, because the affected tank is subject to 35 IAC 218, Subpart B [35 IAC 218.940(a) and (b) and 218.980(a) and (b)].
- b. The affected emission units are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tanks do not use an add-on control device to achieve compliance with an emission limitation or standard.

#### 7.5.5 Control Requirements and Work Practices

- a. Each affected tank and associated internal floating roof shall be operated in compliance with the operating requirements of 40 CFR 60.112b(a)(1) and 60.113b(a), as follows:
  - i. 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 or subsequently emptied and 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 [40 CFR 60.112b(a)(1)(i)].
  - ii. 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 [40 CFR 60.112b(a)(1)(ii)]:
    - A. 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 [40 CFR 60.112b(a)(1)(ii)(A)].

- B. 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 [40 CFR 60.112b(a)(1)(ii)(B)].
  - C. A mechanical shoe seal. A mechanical shoe seal 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 [40 CFR 60.112b(a)(1)(ii)(C)].
- ii. Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents shall provide a projection below the liquid surface [40 CFR 60.112b(a)(1)(iii)].
  - iii. 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 shall be equipped with a cover or lid which is maintained in a closed position at all times (i.e., no visible gaps) 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 [40 CFR 60.112b(a)(1)(iv)].
  - iv. Automatic bleeder vents shall be equipped with a gasket and 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 [40 CFR 60.112b(a)(1)(v)].
  - v. Rim space vents shall be equipped with a gasket and be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting [40 CFR 60.112b(a)(1)(vi)].
  - vi. 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 [40 CFR 60.112b(a)(1)(vii)].
  - vii. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal

or a gasketed sliding cover [40 CFR 60.112b(a)(1)(viii)].

viii. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover [40 CFR 60.112b(a)(1)(ix)].

b. Each affected tank shall also be equipped with a permanent submerged loading pipe. [35 IAC 218.122(b)].

#### 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 tanks are subject to the following:

a. i. Emissions from the affected Storage Tank T107 shall not exceed the following limits:

| <u>(Tons/Month)</u> | VOM | <u>(Tons/Year)</u> |
|---------------------|-----|--------------------|
| 1.0                 |     | 10.0               |

These limits are based on the operational limits in Condition 7.5.6(a)(ii) and the compliance procedures referenced in Condition 7.5.12.

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

The above limitations were established in Permit 95060051, 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. In addition, the above limitations contain revisions to previously issued Permit 95060051, as reflected in this Title V permit issued on November 9, 1999. Specifically, the previous emissions limitations on T107, as established in Construction Permit 91030002, i.e., the limit of 1.0 ton/year, has been revised based upon the latest USEPA calculation procedures (TANKS program) and the maximum fuel throughput indicated in the application [T1].

ii. Operation of the Storage Tank T107 shall not exceed the following limits:

| Gasoline Throughput    |                       |
|------------------------|-----------------------|
| <u>(gallons/month)</u> | <u>(gallons/year)</u> |
| 40,000,000             | 320,000,000           |

These limits are based on the recordkeeping requirements in Condition 7.5.7 and the compliance procedures referenced in Condition 7.5.12.

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

The above limitations were established in Permit 95060051, 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. In addition, the above limitations contain revisions to previously issued Permit 95060051, as reflected in this Title V permit issued on November 9, 1999. Specifically, pursuant to Construction Permit 91030002, there were no previous limitations on gasoline throughput [T1].

- b. i. Emissions from the affected Storage Tank T210 shall not exceed the following limits:

| VOM                 |                    |
|---------------------|--------------------|
| <u>(Tons/Month)</u> | <u>(Tons/Year)</u> |
| 0.16                | 1.6                |

These limits are based on the operational limits in Condition 7.5.6(b)(ii) and the compliance procedures referenced in Condition 7.5.12.

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].

The above limitations were established in permit 95030014, 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].

- ii. Operation of the Storage Tank T210 shall not exceed the following limits:

VOL Throughput  
(gallons/year)

22,500,000

These limits are based on the recordkeeping requirements in Condition 7.5.7 and the compliance procedures referenced in Condition 7.5.12.

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].

The above limitations were established in permit 95030014, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1].

#### 7.5.7 Testing Requirements

- a. As per Condition 7.5.9(a)(iii) and 40 CFR 60.116b, the Permittee is required to determine and keep records the vapor pressure of all VOLs stored in the affected storage tanks. The Permittee shall determine the vapor pressure of the liquids stored in the affected storage tanks as follows:
  - i. Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below [40 CFR 60.116b(e)].
    - 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 [40 CFR 60.116b(e)(1)].
    - B. For refined petroleum products the vapor pressure may be obtained from available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure

from nomographs contained in API Bulletin 2517 (incorporated by reference—see §60.17), unless the Illinois EPA specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s) [40 CFR 60.116b(e)(2)(i)].

- C. For other VOLs, the vapor pressure:
1. May be obtained from standard reference texts [40 CFR 60.116b(e)(3)(i)]; or
  2. Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see §60.17) [40 CFR 60.116b(e)(3)(ii)]; or
  3. Measured by an appropriate method approved by the Illinois EPA or USEPA [40 CFR 60.116b(e)(3)(iii)]; or
  4. Calculated by an appropriate method approved by the by the Illinois EPA or USEPA [40 CFR 60.116b(e)(3)(iv)].

#### 7.5.8 Inspection Requirements

The Permittee shall fulfill the applicable testing and procedures requirements of 40 CFR 60.113b(a) for each affected tank equipped with an internal floating roof as follows:

- a. 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 [40 CFR 60.113b(a)(1)].
- b. 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 there is liquid accumulated on the roof, or the seal is detached, or 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 paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension

may be requested from the Illinois EPA in the inspection report required in Condition 7.5.10 and 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible [40 CFR 60.113b(a)(2)].

- c. For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B) [40 CFR 60.113b(a)(3)]:
  - i. Visually inspect the vessel as specified in Condition 7.5.8(d) and 40 CFR 60.113b(a)(4) at least every 5 years; or
  - ii. Visually inspect the vessel as specified in Condition 7.5.8(b) and 40 CFR 60.113b(a)(2).
- d. 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 the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or 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 paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in Condition 7.5.8(b) and (c)(ii) and 40 CFR 60.113b(a)(2) and (a)(3)(ii) and at intervals no greater than 5 years in the case of vessels specified in Condition 7.5.8(c)(i) and 40 CFR 60.113b(a)(3)(i) [40 CFR 60.113b(a)(4)].

#### 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 each affected storage tank to demonstrate compliance with Conditions 5.6.1, 7.5.6, 7.5.8 and the applicable recordkeeping requirements of 40 CFR 60.115b and 60.116b, pursuant to Section 39.5(7)(b) of the Act:

- a. Records Required by 40 CFR 60, Subpart Kb -
  - i. The Permittee shall keep a record of each inspection performed as required by Condition 7.5.8(a), (b), (c)

and (d) and 40 CFR 60.113b(a)(1), (a)(2), (a)(3), and (a)(4). These records include but are not limited to the following [40 CFR 60.115b(a)(2)].

- A. The date the inspection was performed;
  - B. Name of the inspector(s) who performed the inspection;
  - C. The method of inspection;
  - D. The observed condition of each feature of the internal floating roof (seals, roof decks and fittings), with the raw data recorded during the inspection; and
  - E. Summary of compliance.
- ii. The Permittee shall keep readily accessible records showing the dimension of each storage vessel (i.e., affected storage tanks) and an analysis showing the capacity of the storage vessel [40 CFR 60.116b(b)].
  - iii. The Permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period [40 CFR 60.116b(c)].
- b. Affected Storage Tank Emissions and Throughput Records

The Permittee shall maintain records of VOL throughput (i.e., gal/month and gal/year), and VOM emissions (i.e., tons/month and tons/year), with calculations, from each affected storage tank in accordance with the procedures in Condition 5.6 and 7.5.12, so as to demonstrate compliance with the throughput and emission limitations of Condition 7.5.6. Annual throughput shall be determined each month based upon throughput for the month of record plus the throughput of VOL for the 11 previous months.

#### 7.5.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected storage tank with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - i. Any storage of VOL in an affected tank that is not in compliance with the control requirements due to absence of the features required by Condition 7.5.5, e.g., no "secondary seal," within five days of becoming aware of the non-compliance status.

- ii. Any storage of VOL in an affected tank that is out of compliance with the control requirements (Condition 7.5.5) due to damage, deterioration, or other condition of the tank, within 30 days of becoming aware of the non-compliance status.
- iii. Any exceedance of the emission and operational limits shown in Conditions 7.5.6 within 30 days of becoming aware of the non-compliance status.

b. Reports Required by 40 CFR 60, Subpart Kb

The Permittee shall submit written notifications and reports to the Illinois EPA, Compliance Section as required by the NSPS, for each affected tank, as follows:

- i. The Permittee shall notify the Illinois EPA in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by Condition 7.5.8(a) and (d) and 40 CFR 60.113b(a)(1) and (a)(4) to afford the Illinois EPA the opportunity to have an observer present. If the inspection required by Condition 7.5.8 (d) and 40 CFR 60.113b(a)(4) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Illinois EPA 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 Illinois EPA at least 7 days prior to the refilling [40 CFR 60.113b(a)(5)].
- ii. If any of the conditions described in Condition 7.5.8(b) and 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Illinois EPA within 30 days of the inspection. Each report shall include the information required in Condition 7.5.9(a)(i). This includes but is not limited to the following: identify 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 [40 CFR 60.115b(a)(3)].
- iii. After each inspection required by Condition 7.5.8(c) and 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects

listed in Condition 7.5.8(c)(ii) and 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the Illinois EPA within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of Condition 7.5.5(a) or 7.5.8(c) and 40 CFR 60.112b(a)(1) or 60.113b(a)(3) and list each repair made [40 CFR 60.115b(a)(4)].

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tank 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 in the material stored in a tank, provided the tank continues to comply with the Conditions in Section 7.5 of this permit.
- b. Changes accounted for in Condition 5.11.

7.5.12 Compliance Procedures

- a. Emissions from each affected storage tank shall be determined through the use of the TANKS program.
- b. For the purpose of estimating HAP emissions from the tanks, the vapor wt percent (based on a 1992 USEPA survey) of each HAP for each product times the VOM emissions contributed by that product shall be used (e.g., hexane represents 1.4% by weight of the VOM in gasoline) and calculating individual HAP emissions as in (a) above. Total monthly HAP emissions will be based on the sum of the emissions for each individual HAP.

7.6 Truck Loading Racks

Vapor Recovery Unit

7.6.1 Description

The Permittee operates the East and West truck loading/unloading racks which are used to load and unload various petroleum products. Each rack includes a total of four loading bays with four loading points.

The VOM emissions from the truck loading racks occur when material is loaded into delivery vehicles. For the East and West loading racks, vapor recovery units (carbon adsorption systems) are used to capture and recover the emissions that occur as a result of displacement of vapors in the delivery vehicles. The Lube Oil loading rack does not utilize vapor recovery.

The VOM emissions from unloading material are accounted for in the working losses of the storage tanks the material is loaded into, with the exception of fugitive emissions that are attributed to leaking components, i.e., valves, flanges,...etc.

7.6.2 List of Emission Units and Pollution Control Equipment

| Emission Unit                         | Description  | Emission Control Equipment | Date of Construction |
|---------------------------------------|--|----------------------------|----------------------|
| West Loading Rack With Vapor Recovery | Four Bay Loading Rack Used for Loading Various Petroleum Products Into Tank Trucks | Vapor Recovery (CO1)       | 1979                 |
| East Loading Rack With Vapor Recovery | Four Bay Loading Rack Used for Loading Various Petroleum Products Into Tank Trucks | Vapor Recovery (CO2)       | 1964<br>VRU: 1979    |

7.6.3 Applicability Provisions and Applicable Regulations

- a. The "affected loading rack" for the purpose of these unit-specific conditions, is a loading rack described in Conditions 7.6.1 and 7.6.2.
- b. An "affected loading rack," for the purpose of these unit-specific conditions, is a loading rack that is subject to the requirements of 35 IAC 218.582 and relies on a vapor collection/recovery unit for compliance.

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.

Each loading rack used to transfer gasoline into a delivery vessel (gasoline tank truck) from any bulk gasoline terminal is subject to the requirements of 35 IAC 218.582.

- c. 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 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 218.108 [35 IAC 218.122(a)].

Exception: If no odor nuisance exists the limitations of the above shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294°3K (70°F) [35 IAC 218.122(c)].

Therefore, the loading rack is exempt from the above requirement for the purposes of loading ethanol and distillate fuels, since the vapor pressure of pure ethanol and distillate fuels is below 1.0 psia.

Compliance with 35 IAC 218.122(c) is assured through compliance with 35 IAC 218.582.

#### 7.6.4 Non-Applicability of Regulations of Concern

- a. The affected loading racks are not subject to 40 CFR 60 Subpart XX, the NSPS for Bulk Gasoline Terminals, because affected loading racks were constructed prior to December 17, 1980 [40 CFR 60.500(b)].

#### 7.6.5 Control Requirements and Work Practices

Control requirements are not set for the affected loading racks. However, there may be requirements for source-wide control requirements set forth in Condition 5.5 and 5.6.

#### 7.6.6 Production and Emission Limitations

In addition to Condition 5.3.3, 5.5.1, and the source-wide emission limitations in Condition 5.6, the affected loading racks are subject to the following:

- a. At all times during the loading of gasoline into any delivery vessel, the vapor control system shall operate and

all vapors displaced in the loading of gasoline are to be vented only to the vapor control system [35 IAC 218.582(a)(2)].

- b. There shall be no liquid drainage from the loading device of an affected loading rack when it is not in use [35 IAC 218.582(a)(3)].
- c. All loading and vapor return lines shall be equipped with fittings which are vapor tight [35 IAC 218.582(a)(4)].
- d. No person shall cause or allow the transfer of gasoline into a delivery vessel from an affected loading rack unless the delivery vessel displays the appropriate sticker pursuant to 35 IAC 218.584(b) or (d) or the delivery vessel has provided a current certification as required by 35 IAC 218.584(c)(3), and the delivery vessel meets the following requirements [35 IAC 218.582(a)(5) and 218.584(a)]:
  - i. Includes a vapor space connection that is equipped with fitting which is vapor tight;
  - ii. Has its hatches closed at all times during loading or unloading operations, unless a top loading vapor recovery system is used;
  - iii. Does not internally exceed a gauge pressure of 18 inches of water or a vacuum of 6 inches of water;
  - iv. Is designed and maintained to be vapor tight at all times during normal operations;
  - v. Is not refilled in Illinois at other than:
    - A. Bulk gasoline terminals that comply with the requirements of 35 IAC 218.582; or
    - B. Bulk gasoline plants that comply with the requirements of 35 IAC 218.581(b).
  - vi. Are tested annually in accordance with Method 27, 40 CFR 60, Appendix A. Each vessel must be repaired and retested within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, when it fails to sustain:
    - A. A pressure drop of no more than three inches of water in five minutes; and
    - B. A vacuum drop of no more than three inches of water in five minutes.

- e. The Permittee shall operate the terminal vapor collection system and gasoline loading equipment in a manner that prevents [35 IAC 218.582(b)(1)]:
  - i. 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 [35 IAC 218.582(b)(1)(A)];
  - ii. 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 35 IAC 218.112 [35 IAC 218.582(b)(1)(B)]; and
  - iii. Avoidable leaks of liquid during loading or unloading operations [35 IAC 218.582(b)(1)(C)].
- f. The Permittee shall provide a pressure tap or equivalent on the terminal vapor collection system in order to allow the determination of compliance with 35 IAC 218.582(b)(1)(A) [35 IAC 218.582(b)(2)].
- g. The Permittee shall 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 35 IAC 218.582(c)(1)(A) or (B) [35 IAC 218.582(b)(3)].

7.6.7 Testing Requirements

Testing requirements are not set for the affected loading racks. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.6.8 Inspection and Monitoring Requirements

a. Compliance Assurance Monitoring (CAM) Requirements

The affected emission units are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the Compliance Assurance Monitoring (CAM) Plan described in Attachment 3, 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. Continuous monitoring equipment installed, calibrated, maintained and operated according to vendor specifications shall be used at all times while the vapor recovery units

are in use. The continuous monitoring equipment must monitor the VOM concentration of each carbon adsorption bed exhaust or the exhaust of the bed next in sequence to be desorbed.

- c. Each calendar month, the vapor collection system, the vapor recovery units, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of the above, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

#### 7.6.9 Recordkeeping Requirements

##### a. General Recordkeeping

The Permittee shall maintain records of the following for each affected loading rack to demonstrate compliance with Conditions 5.5 and 5.6:

- i. The identification and properties of each organic liquid distributed through each affected loading rack, as related to emissions, i.e., vapor pressure and molecular weight;
- ii. The amount of each organic liquid distributed through each affected loading rack, in gallons per month and year, with annual records updated each month by totaling the throughput for that month plus the preceding 11 months;
- iii. Testing reports, that include but are not limited to tests used to determine control efficiency or emissions; and
- iv. Emissions of VOM attributable to loading of petroleum products, tons/month and tons/year, with supporting calculations, calculated utilizing the methods and procedures shown in Condition 7.6.12, with annual records updated each month by totaling the throughput for that month plus the preceding 11 months.

##### b. Records of Operations

The Permittee shall maintain records of the following for the affected loading rack and associated vapor recovery unit to demonstrate compliance with Condition 7.6.6 and 7.6.7:

- i. The use of an affected loading rack for loading of any gasoline tank truck when the associated VRU was

not operating at the appropriate pressure drop, including:

- A. The date and time of the loading;
  - B. The specific problem with the VRU monitor;
  - C. Type of material loaded; and
  - D. The reason that loading occurred even though the VRU was not operating at the appropriate pressure drop.
- ii. The use of an affected loading rack for the loading of any nonvapor-tight gasoline tank (one not meeting the requirements of Condition 7.6.6) or a delivery vessel that does not display the appropriate sticker or has not provided a current certification (one not meeting the requirements of Condition 7.6.6), including:
- A. The date and time of the loading;
  - B. The specific reason the vessel did not meet the requirements of Condition 7.6.6;
  - C. Type of material loaded; and
  - D. The reason why loading was allowed.
- c. Inspection Requirements

The Permittee shall keep the following records for each affected loading rack and associated vapor collection/recovery system which delivers liquid product into gasoline tank trucks.

A record of each leak inspection (Condition 7.6.8) shall be kept on file at the terminal. Inspection records shall include, as a minimum, the following information:

- i. Date of inspection;
- ii. Findings (may indicate no leaks discovered; or location, nature, and severity of each leak);
- iii. Leak determination method;
- iv. Corrective action, including the date each leak was repaired and the reasons for any repair interval in excess of 15 days; and
- v. Name and signature of the person that performed the inspection.

d. Gasoline Tank Truck Records

The Permittee shall keep the following records for the gasoline tank trucks loaded at this terminal:

- i. The tank truck vapor tightness documentation required under 40 CFR 60.502(e)(1) (Condition 7.6.6); and
  - ii. The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include as a minimum, the following information:
    - A. Test title: Gasoline Deliver Tank Pressure Test - EPA Reference Method 27;
    - B. Owner name and address;
    - C. Tank identification number;
    - D. Testing location;
    - E. Date of test;
    - F. Tester name and signature;
    - G. Witnessing inspector, if any: name, signature, and affiliation; and
    - H. Test results: Actual pressure change in 5 minutes, mm of water (average 2 runs).
- 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 7.6.8(a), as required by 40 CFR 64.9(b)(1).

7.6.10 Reporting Requirements

a. Annual Report

The Permittee shall provide an annual report, to be submitted with the source's annual emission report, which includes the following:

- i. The monthly and annual throughputs for each affected loading rack for each month of the previous calendar year sufficient to demonstrate compliance with the 12

month running total of Condition 5.6, 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, 12 months in all);

- ii. The monthly and annual emissions of VOM attributable to the loading of petroleum products for each affected loading rack for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.6, 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, 12 months in all); and
- iii. Summarization of any use of an affected loading rack to load delivery vessels (gasoline tank trucks) into trucks that did not meet the requirements of Conditions 7.6.6, including:
  - A. The date and time of the loading;
  - B. The specific reason the vessel did not meet the requirements of Condition 7.6.7;
  - C. Type of material loaded; and
  - D. The reason why loading was allowed.

b. Semi-Annual Reports

Pursuant to Section 39.5(7)(f)(i) of the Act, the Permittee shall submit a semi-annual report for any monitoring that is required. These reports shall be submitted as indicated in Condition 8.6.1 and shall include the following information for the preceding 6 month period:

- i. Summary of any use of an affected loading rack when the VRU was not operating at the appropriate pressure drop, including:
  - A. Date and time of occurrence;
  - B. Specific problem associated with the VRU;
  - C. Type of material being loaded; and
  - D. Reason why loading continued.

- ii. Summary of times when the continuous monitoring equipment was not functioning, including:
  - A. Date and time of occurrence; and
  - B. Specific problem associated with the indicator or recording equipment.

c. Reporting of Non-Compliance

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the emission limits as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

Notification within 15 days of operation of the affected loading rack and/or associated vapor recovery unit in excess of the limitations of Condition 7.6.6.

d. Reporting of Malfunction or Breakdown

The Permittee shall promptly notify the Illinois EPA, Des Plaines Regional Office on the same or next working day of any malfunction or breakdown of any vapor recovery unit, documenting the time of occurrence and type of malfunction or breakdown. The Permittee shall also submit a quarterly report summarizing the quantity of emissions, the type and duration of each malfunction and the steps taken to reduce the occurrence of each malfunction or breakdown.

e. 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)].

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected loading racks. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.6.12 Compliance Procedures

- a. Compliance with the operational limitations of Condition 5.6 and 7.6.6, and emission limitations of Condition 7.6.6 shall be demonstrated through the inspection/monitoring, recordkeeping and reporting requirements of Conditions 7.6.8, 7.6.9, and 7.6.10.
- b. Compliance with the control requirements of 5.5, 5.6 and 7.6.6 shall be demonstrated by the inspection/monitoring, recordkeeping and reporting requirements of Conditions 7.6.8, 7.6.9, and 7.6.10 and the fact that compliance of the affected loading rack and associated vapor recovery unit have previously been demonstrated by fulfillment of the test requirements of 40 CFR 60.8 by measurement of the total organic concentration(s) in the effluent stream of the vapor recovery system pursuant to 40 CFR 60.503.
- c. Emissions from the loading rack are calculated for three different processes - loading gasoline, loading ethanol, and loading #2 distillate. Loading rack emissions for each process are the sum of emissions from the vapor recovery unit (controlled) and the fugitive emissions from the vapor collection system (uncontrolled). Emissions are calculated using the appropriate liquid throughputs along with the appropriate methodology. Monthly VOM emissions from the loading rack shall be determined by use of the following:
  - i. Loading loss emissions for gasoline, distillates, and ethanol, respectively, based on the AP-42 equations for loading of tank trucks (Transportation And Marketing Of Petroleum Liquids - Section 5.2):

A. Loading Loss Factor Calculation

AP-42 Section 5.2 - Equation 1

$$L_L = 12.46 \frac{SPM}{T}$$

Where:

$L_L$  = loading loss, pounds per 1000 gallons (lb/10<sup>3</sup> gal) of liquid loaded

S = a saturation factor (see Table 5.2-1)

P = true vapor pressure of liquid loaded, pounds per square inch absolute (psia) (see Figure 7.1-5, Figure 7.1-6, and Table 7.1-2)

M = molecular weight of vapors, pounds per pound-mole (lb/lb-mole) (see Table 7.1-2)

T = temperature of bulk liquid loaded, °R (°F + 460)

| <u>Fuel</u>                           | <u>S</u> <sup>(1)</sup> | <u>P</u> <sup>(2)</sup> | <u>M</u> <sup>(2)</sup> | <u>T</u> <sup>(3)</sup> | <u>L<sub>L</sub></u>  |
|---------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------|
| Gasoline (LL <sub>g</sub> )<br>RVP 10 | 1.0                     | 4.1200                  | 66.00                   | 509                     | 6.6564                |
| Ethanol (LL <sub>e</sub> )            | 1.0                     | 0.3847                  | 46.07                   | 509                     | 0.4339                |
| #2 Distillate<br>(LL <sub>D</sub> )   | 1.0                     | 0.0044                  | 130                     | 509                     | 0.0140                |
| Turbine Fuel                          | 1.0                     | 0.0058                  | 130                     | 509                     | 0.0185 <sup>(4)</sup> |

(1) USEPA, AP-42 (Table 5.2-1), factor for tank truck, submerged loading, dedicated service

(2) USEPA, AP-42 (Table 7.1-2 and 7.1.3)

(3) USEPA, AP-42 (Table 7.1-7) daily average temperature range for Chicago (°R (49 °F + 460))

(4) No loading loss since turbine fuel is shipped via pipeline

#### B. Uncontrolled VOM Emissions

Loading rack fugitive (uncontrolled) emissions are calculated using the following formula for each material described above.

Uncontrolled VOM Emissions per Liquid Loaded  
(lb/month) = Throughput<sub>L</sub>/1000 gals) x L<sub>L</sub> x 1.3%.

Total Uncontrolled VOM Emissions (lb/month) =  
Uncontrolled Gasoline Emissions  
(lb/month) + Uncontrolled Distillate  
Emissions (lb/month) + Uncontrolled  
Ethanol Emissions (lb/month)

Where:

Throughput<sub>L</sub> = Monthly Throughput for gasoline, distillate fuel, and ethanol respectively

L<sub>L</sub> = the loading loss factor for gasoline, distillate fuel, and ethanol respectively, calculated above, pounds per 1000 gallons (lb/10<sup>3</sup> gal) of liquid loaded

1.3% = Fraction of uncontrolled (fugitive) emissions (1.3%) from loading

C. Controlled VOM Emissions Calculation:

Controlled VOM Emissions per Liquid Loaded (lb/month) =  $\text{Throughput}_L / 1000 \text{ gals} \times L_L \times 98.7\% \times (1 - \text{Eff})$

Where:

$\text{Throughput}_L$  = Monthly Throughput for gasoline, distillate fuel, and ethanol respectively

$L_L$  = the loading loss factor for gasoline, distillate fuel, and ethanol respectively, calculated above, pounds per 1000 gallons (lb/10<sup>3</sup> gal) of liquid loaded

98.7% = Fraction of captured (controlled) emissions (98.7%) from loading; and

Eff = Control efficiency of the vapor recovery unit for each loading rack.

D. Control Efficiency Calculation:

Annual stack testing is conducted and used to determine the vapor recovery unit (VRU) efficiency.

$$\text{Eff} = \frac{(L_L - [\text{VRU rating (mg/l)} \times (1 \text{ kg}/10^6 \text{ mg}) \times (2.2046 \text{ lb/kg}) \times (3.785 \text{ l/gal}) \times (1000 \text{ gal})])}{L_L}$$

$L_L$  = Loading Loss Factor converted to milligrams per liter (mg/l)

VRU = Vapor Recovery Unit Rating (mg/l)

- d. Monthly HAP emissions from the loading rack shall be determined by speciating the individual HAP emissions as a percentage of the gasoline and ethanol throughputs (e.g., hexane represents 1.4% by weight of the VOM in gasoline) and calculating individual HAP emissions as in (c) above. Total monthly HAP emissions will be based on the sum of the emissions for each individual HAP.

## 7.7 Fugitives from Leaking Components

Control: None

### 7.7.1 Description

Fugitive emissions from equipment components, those not included in the loading rack emissions, such as valves, flanges, etc., are generated during the processing of material through the piping distributed throughout the source.

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

| Emission Unit  | Description  | Emission Control Equipment               |
|--|--|--|
| Equipment Components (Valves, Flanges, Pump Seals, Etc.) | Processing of Material Throughout the Source's Piping System | Work Practices and Equipment Replacement |

### 7.7.3 Applicable Provisions and Regulations

- a. The "affected Equipment Components (Valves, Flanges, Pump Seals, Etc.)" for the purpose of these unit-specific conditions, are the Equipment Components (Valves, Flanges, Pump Seals, Etc.) described in Conditions 7.1.1 and 7.1.2.
- b. There are no general rules or regulations that address the operation of these emission units located at a petroleum bulk terminal. However, 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. Note that pursuant to Condition 5.10, the source is shielded from determining compliance with 35 IAC 218.142.

### 7.7.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the source not being subject to 35 IAC Part 218, Subpart TT, because the potential to emit VOM from affected emission units does not exceed 25 tpy.

### 7.7.5 Control Requirements and Work Practices

Control requirements are not set for the affected emission units. However, there may be requirements for source-wide control requirements set forth in Condition 5.5.

7.7.6 Production and Emission Limitations

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

The Permittee shall repair any component from which a leak of VOL can be observed. The repair shall be completed as soon as practicable but no later than 15 days after the leak is found. If the leaking component cannot be repaired until the process unit is shut down, the leaking component must then be repaired before the unit is restarted.

7.7.7 Testing Requirements

Testing requirements are not set for the affected emission units. However, there are source-wide testing requirements in Condition 5.7 and general testing requirements in Condition 8.5.

7.7.8 Inspection Requirements

The Permittee shall visually inspect for leaks from all affected equipment components on a monthly basis.

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected emission units to demonstrate compliance with Conditions 5.6.1, 7.7.4, 7.7.6 and 7.7.8, pursuant to Section 39.5(7)(b) of the Act:

- a. Count of the number of components (i.e., valves, pump seals, etc.) in light liquid, heavy liquid or vapor service, as applicable; and
- b. Emissions of VOM attributable to fugitive losses (valves, pump seals, etc.), tons/month and tons/year, with supporting calculations, calculated utilizing the compliance procedures in Condition 7.7.12 or other approved USEPA methodology.

7.7.10 Reporting Requirements

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

- a. Operation or failure to repair a leaking component (emission unit in excess of the limits specified in Condition 7.7.6 within 5 days of such occurrence.

- b. Operation of the affected emission units in excess of the limits specified in Conditions 7.7.8 and 7.7.9 within 30 days of such occurrence.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected emission units. However, there may be provisions for source-wide operational flexibility set forth in Condition 5.11 of this permit.

7.7.12 Compliance Procedures

- a. Compliance with the fugitive VOM emission limitations of Condition 7.7.1 and pursuant to the overall VOM emissions limitation of Condition 5.6 shall be demonstrated through the calculation of the following equation:

Total Fugitive VOM Emissions (lb/hr) =

$$\sum_{i=1} EF_i \times N_i$$

Where:

$EF_i$  = The specific component's (i.e., valves, pump seals, etc.) emission factor listed below. Emission factors found in "Development of Fugitive Emission Factors and Emission Profiles for Petroleum Marketing Terminals, Volume 1, Published by the American Petroleum Institute; and

| Component          | Light Liquid <sup>a</sup> | Heavy Liquid <sup>b</sup> | Vapor <sup>c</sup>      |
|--------------------|---------------------------|---------------------------|-------------------------|
| Connectors         | 2.3 x 10 <sup>-5</sup>    | Negligible                | 6.7 x 10 <sup>-5</sup>  |
| Valves             | 1.5 x 10 <sup>-4</sup>    | Negligible                | 1.6 x 10 <sup>-4</sup>  |
| Open-Ended Lines   | 6.7 x 10 <sup>-3</sup>    | Negligible                | 6.7 x 10 <sup>-3</sup>  |
| Pump Seals         | 9.3 x 10 <sup>-4</sup>    | Negligible                | 0.00                    |
| Other <sup>d</sup> | 2.87 x 10 <sup>-4</sup>   | Negligible                | 2.65 x 10 <sup>-4</sup> |

<sup>a</sup> Light liquid - not in gas/vapor service or heavy liquid service;

<sup>b</sup> Heavy liquid - material in a liquid state in which the with a vapor pressure less than or equal to 0.1 psia at 100°F

<sup>c</sup> Vapor - material in a gaseous state at operating conditions; and

<sup>d</sup> Other means any components other than connectors, valves, open-ended lines, and pump seals

*N<sub>i</sub>* = Number of specific components (i.e., valves, pump seals, etc.) in light liquid, heavy liquid or gas service as recorded in the records required in Condition 7.7.9.

Total annual emissions, in tons/year, shall be calculated by multiplying the hourly emission by 8,760 hours/year.

- b. Fugitive HAP emissions from equipment components, other than those included in the loading rack emissions, shall be determined by speciation of the individual HAP emissions as a percentage of the gasoline and ethanol throughputs (e.g., hexane represents 1.4% by weight of the VOM in gasoline) and calculating individual HAP emissions as in (c) above. Total fugitive HAP emissions will be based on the sum of the emissions for each individual HAP.

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after \_\_\_\_\_ **Error! Bookmark not defined.** (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

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

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

### 8.3 Emissions Trading Programs

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

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

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

#### 8.4.2 Changes Requiring Prior Notification

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

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

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

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

## 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods 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 (A - 18J)  
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 Obligation to Comply with Title I Requirements

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

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

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

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<br>P<br><u>Mg/hr</u> | E<br><u>kg/hr</u> | English<br>P<br><u>T/hr</u> | E<br><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             |

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<br>P<br><u>Mg/hr</u> | E<br><u>kg/hr</u> | English<br>P<br><u>T/hr</u> | E<br><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             |

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

|                                    |                     |
|------------------------------------|---------------------|
| Table 3.1 PSEU Designation:        | Truck Loading Racks |
| Significant Emission Unit Section: | 7.6                 |
| Pollutant:                         | VOM                 |

Indicators: #1: Vapor Recovery Unit VOM exit concentration

GENERAL CRITERIA

|  |   |
|--|---|
| THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:                  | The carbon adsorber outlet VOC concentration in percent by volume as propane is continuously monitored.   |
| THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE: | Indicator Range: A maximum VOC concentration shall be established using the most appropriate of the following: the most recent performance test data, manufacturer's recommendations, engineering calculations, a reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) and/or historical data. |
| QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:                         | Exceedances of the lower operating limit to less than 5% of operating time.   |

PERFORMANCE CRITERIA

|   |  |
|---|--|
| THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:   | The tubing inlet of the hydrocarbon analyzer shall be installed at the carbon adsorber outlet. The instantaneous and one-hour rolling average readings shall be displayed and recorded to disk.  |
| VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:                  | The monitoring device shall be calibrated, operated, and maintained in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated, operated, and maintained accurately.  |
| QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA: | The monitoring device shall be calibrated, operated, and maintained in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated, operated, and maintained accurately. The monitoring device shall meet the requirements of 40 CFR Part 60, Appendix A, Method 21, Sections 2, 3, 4.1, 4.2, and 4.4. However, the words "leak definition" in Method 21 shall be the outlet concentration. The calibration gas shall either be representative of the compounds to be measured or shall be methane, and shall be at a concentration associated with 125 percent of the expected organic compound concentration level for the carbon adsorber outlet vent. |

|  |  |
|--|--|
| THE MONITORING FREQUENCY:  | Continuous   |
| THE DATA COLLECTION PROCEDURES THAT WILL BE USED:  | Instantaneous and one hour rolling average are recorded to disk and displayed by the recorder. |
| THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED: | One hour rolling average hydrocarbon concentration.  |

#### 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)

Attachment 5 Summary of Equipment Re-designations

West Unit

| Unit                             | Previous Mt. Prospect Terminal Designation <sup>a</sup> | New Arlington Heights Terminal Designation |
|----------------------------------|---|--|
| Storage Tank                     | T01   | T101                                       |
| Storage Tank                     | T02   | T102                                       |
| Storage Tank                     | T03   | T103                                       |
| Storage Tank                     | T04   | T104                                       |
| Storage Tank                     | T05   | T105                                       |
| Storage Tank                     | T06   | T106                                       |
| Storage Tank                     | T07   | T107                                       |
| Storage Tank                     | T10   | T110                                       |
| Storage Tank                     | T11   | T111                                       |
| Storage Tank                     | T12   | T112                                       |
| Gasoline/Ethanol Loading Process | P01   | P01  |
| Vapor Recovery Unit              | C01   | C01  |

- a Equipment originally covered under the CAAPP permit for the CITGO Mt. Prospect Terminal, located at 2316 Terminal Drive, Arlington Heights, IL (ID No. 031804AAM- CAAPP No. 95060051)

East Unit

| Unit                             | Previous Des Plaines Terminal Designation <sup>a</sup> | New Arlington Heights Terminal Designation |
|----------------------------------|--|--|
| Storage Tank                     | T01  | T201                                       |
| Storage Tank                     | T02  | T202                                       |
| Storage Tank                     | T03  | T203                                       |
| Storage Tank                     | T04  | T204                                       |
| Storage Tank                     | T05  | T205                                       |
| Storage Tank                     | T08  | T221                                       |
| Storage Tank                     | T09  | T210                                       |
| Gasoline/Ethanol Loading Process | P01  | P02  |
| Vapor Recovery Unit              | C01  | C02  |

- a Equipment originally covered under the CAAPP permit for the P.D.V. Midwest Refining (PDVMR) Des Plaines Terminal, located at 2304 Terminal Drive, Mt. Prospect, IL 60056 (ID No. 031804AAL - CAAPP No. 95060124)

Attachment 6 Summary of Storage Tank Features and Groupings

| <u>Group/Tank #</u> | <u>Capacity<br/>(Gallons)</u> | <u>Tank Type</u>             | <u>Primary<br/>Seal</u> | <u>Secondary<br/>Seal</u> | <u>Material<br/>Stored</u>       | <u>Expected Max.<br/>Vapor Pressure<br/>(psia at 70°F)</u> | <u>Date<br/>Constructed</u> |
|---------------------|-------------------------------|------------------------------|-------------------------|---------------------------|----------------------------------|--|-----------------------------|
| Group 1             |                               |                              |                         |                           |                                  |  |                             |
| West Unit           |                               |                              |                         |                           |                                  |  |                             |
| T110                | 27,594                        | Fixed Roof                   | ----                    | ----                      | Ethanol                          | 0.87   | 1980                        |
| T111                | 27,594                        | Fixed Roof                   | ----                    | ----                      | Ethanol                          | 0.87   | 1980                        |
| T112                | 27,594                        | Fixed Roof                   | ----                    | ----                      | Ethanol                          | 0.87   | 1980                        |
| East Unit           |                               |                              |                         |                           |                                  |  |                             |
| T221                | 19,600                        | Fixed roof                   | ----                    | ----                      | Ethanol                          | 0.87   | 1967                        |
| Group 2             |                               |                              |                         |                           |                                  |  |                             |
| West Unit           |                               |                              |                         |                           |                                  |  |                             |
| T106                | 1,380,792                     | Fixed roof                   | ----                    | ----                      | Distillate<br>Fuels              | <0.75  | 1956                        |
| East Unit           |                               |                              |                         |                           |                                  |  |                             |
| T201                | 2,184,000                     | Fixed roof                   | ----                    | ----                      | Distillate<br>fuels              | <0.75  | 1961                        |
| T203                | 1,696,950                     | Fixed roof                   | ----                    | ----                      | Distillate<br>fuels              | <0.75  | 1964                        |
| Group 3             |                               |                              |                         |                           |                                  |  |                             |
| East Unit           |                               |                              |                         |                           |                                  |  |                             |
| T204                | 2,604,000                     | External<br>floating<br>roof | Mechanical<br>Shoe      | Rim-<br>mounted           | Various<br>Petroleum<br>Products | 6.2  | 1964                        |
| T205                | 1,218,000                     | External<br>floating<br>roof | Mechanical<br>Shoe      | Rim-<br>mounted           | Various<br>Petroleum<br>Products | 6.2  | 1964                        |

| <u>Group/Tank #</u> | <u>Capacity<br/>(Gallons)</u> | <u>Tank Type</u>             | <u>Primary<br/>Seal</u>                               | <u>Secondary<br/>Seal</u> | <u>Material<br/>Stored</u>       | <u>Expected Max.<br/>Vapor Pressure<br/>(psia at 70°)</u> | <u>Date<br/>Constructed</u> |
|---------------------|-------------------------------|------------------------------|---|---------------------------|----------------------------------|---|-----------------------------|
| Group 4             |                               |                              |   |                           |                                  |   |                             |
| West Unit           |                               |                              |   |                           |                                  |   |                             |
| T101                | 2,150,106                     | Internal<br>Floating<br>Roof | Liquid-<br>Mounted<br>Resilient<br>Mechanical<br>Shoe | Rim-<br>mounted           | Various<br>Petroleum<br>Products | 6.2   | 1956                        |
| T102                | 1,368,360                     | Internal<br>Floating<br>Roof |   | ----                      | Various<br>Petroleum<br>Products | 6.2   | 1956                        |
| T103                | 927,318                       | Internal<br>Floating<br>Roof | Vapor-<br>Mounted<br>Resilient                        | Rim -<br>mounted          | Various<br>Petroleum<br>Products | 6.2   | 1954                        |
| T104                | 2,139,606                     | Internal<br>Floating<br>Roof | Vapor-<br>Mounted<br>Resilient                        | Rim -<br>mounted          | Various<br>Petroleum<br>Products | 6.2   | 1956                        |
| T105                | 3,358,740                     | Internal<br>Floating<br>Roof | Mechanical<br>Shoe                                    | ----                      | Various<br>Petroleum<br>Products | 6.2   | 1988                        |
| East Unit           |                               |                              |   |                           |                                  |   |                             |
| T202                | 3,024,000                     | Internal<br>floating<br>roof | Mechanical<br>Shoe                                    | ----                      | Various<br>Petroleum<br>Products | 6.2   | 1964                        |
| Group 5             |                               |                              |   |                           |                                  |   |                             |
| West Unit           |                               |                              |   |                           |                                  |   |                             |
| T107                | 3,094,728                     | Internal<br>Floating<br>Roof | Liquid-<br>Mounted<br>Resilient                       | Rim -<br>Mounted          | Various<br>Petroleum<br>Products | 6.2   | 1992                        |
| East Unit           |                               |                              |   |                           |                                  |   |                             |
| T210                | 192,400                       | Internal<br>floating<br>roof | Mechanical<br>Shoe                                    | ----                      | Ethanol                          | .87   | 1995                        |

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