

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO  
Enterprise Products Operating LLC

AUTHORIZING THE OPERATION OF  
Appelt Terminal  
Special Warehousing and Storage

LOCATED AT  
Harris County, Texas  
Latitude 29° 45' 35" Longitude 95° 8' 33"  
Regulated Entity Number: RN106128457

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No:   03607   Issuance Date: \_\_\_\_\_

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For the Commission

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## **General Terms and Conditions**

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

## **Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting**

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
  - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
  - E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporate the 40 CFR Part 63 Subparts by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(1)(E)
  - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
  - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
    - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
    - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation

on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

4. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:

- A. For degassing of stationary VOC storage tanks, the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 115.541(a) - (c) (relating to Emission Specifications)
  - (ii) Title 30 TAC § 115.541(f) (relating to Emission Specifications), for floating roof storage tanks
  - (iii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.
  - (iv) Title 30 TAC § 115.542(b) - (d), (relating to Control Requirements)
  - (v) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)
  - (vi) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections
  - (vii) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring
  - (viii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices
  - (ix) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

- (x) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring
- (xi) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)
- (xii) Title 30 TAC § 115.545(1) - (7), (9) - (11) and (13) (relating to Approved Test Methods)
- (xiii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping
- (xiv) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)
- (xv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)
- (xvi) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification
- (xvii) Title 30 TAC § 115.547(4) (relating to Exemptions)

5. The permit holder shall comply with the following requirements of 30 TAC Chapter 117:

- A. For boilers, process heaters, and stationary reciprocating engines exempt from Subchapter D, Division 1 at minor sources of NO<sub>x</sub> under 30 TAC § 117.2003(a), the permit holder shall comply with 30 TAC §§ 117.2030(c), 117.2035(g), 117.2045(b) and 117.2045(c).

6. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
- B. Title 40 CFR § 60.8 (relating to Performance Tests)
- C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
- D. Title 40 CFR § 60.12 (relating to Circumvention)
- E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

- F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)
  - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
7. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

### **New Source Review Authorization Requirements**

8. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
- A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
9. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
10. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

## Compliance Requirements

11. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
12. Use of Emission Credits to comply with applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115
    - (ii) Title 30 TAC Chapter 117
    - (iii) Offsets for Title 30 TAC Chapter 116
  - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2)
    - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
    - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2)
    - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
    - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
13. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115

- (ii) Title 30 TAC Chapter 117
  - (iii) If applicable, offsets for Title 30 TAC Chapter 116
  - (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
- (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
  - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
  - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
  - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
  - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

### **Permit Location**

14. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

### **Permit Shield (30 TAC § 122.148)**

15. A permit shield is granted for the emission units, groups, or processes specified in the attached “Permit Shield.” Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment “Permit Shield.” Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

## **Attachments**

**Applicable Requirements Summary**

**Permit Shield**

**New Source Review Authorization References**

## **Applicable Requirements Summary**

**Unit Summary ..... 12**

**Applicable Requirements Summary ..... 19**

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
EMERGEN1	SRIC ENGINES	N/A	60III-001	40 CFR Part 60, Subpart III	No changing attributes.
EMERGEN1	SRIC ENGINES	N/A	63ZZZZ-001	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	R5112-001	30 TAC Chapter 115, Storage of VOCs	Product Stored = VOC other than crude oil or condensate, Storage Capacity = Capacity is greater than 40,000 gallons, True Vapor Pressure = True vapor pressure is less than 1.0 psia
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	R5112-002	30 TAC Chapter 115, Storage of VOCs	Product Stored = VOC other than crude oil or condensate, Storage Capacity = Capacity is greater than 40,000 gallons, True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	R5112-003	30 TAC Chapter 115, Storage of VOCs	Product Stored = VOC other than crude oil or condensate, Storage Capacity = Capacity is greater than 40,000 gallons, True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	R5112-004	30 TAC Chapter 115, Storage of VOCs	Product Stored = Crude oil and/or condensate, Storage Capacity = Capacity is greater than 40,000 gallons, True Vapor Pressure = True vapor pressure is less than 1.0 psia

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	R5112-005	30 TAC Chapter 115, Storage of VOCs	Product Stored = Crude oil and/or condensate, Storage Capacity = Capacity is greater than 40,000 gallons, True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	R5112-006	30 TAC Chapter 115, Storage of VOCs	Product Stored = Crude oil and/or condensate, Storage Capacity = Capacity is greater than 40,000 gallons, True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	60Kb-001	40 CFR Part 60, Subpart Kb	Product Stored = Petroleum liquid (other than petroleum or condensate), Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	60Kb-002	40 CFR Part 60, Subpart Kb	Product Stored = Petroleum liquid (other than petroleum or condensate), Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	60Kb-003	40 CFR Part 60, Subpart Kb	Product Stored = Petroleum (other than crude oil) or condensate stored, processed, and/or treated after custody transfer, Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	60Kb-004	40 CFR Part 60, Subpart Kb	Product Stored = Petroleum (other than crude oil) or condensate stored, processed, and/or treated after custody transfer, Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	60Kb-005	40 CFR Part 60, Subpart Kb	Product Stored = Crude oil stored, processed, and/or treated after custody transfer, Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia, Reid Vapor Pressure = Reid vapor pressure is less than 2.0 psia
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	60Kb-006	40 CFR Part 60, Subpart Kb	Product Stored = Crude oil stored, processed, and/or treated after custody transfer, Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia, Reid Vapor Pressure = Reid vapor pressure is less than 2.0 psia

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP 1	STORAGE TANKS/VESSELS	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	60Kb-007	40 CFR Part 60, Subpart Kb	Product Stored = Crude oil stored, processed, and/or treated after custody transfer, Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia, Reid Vapor Pressure = Reid vapor pressure is greater than or equal to 2.0 psia
GRP ENG2	SRIC ENGINES	FIREPUMP <sub>1</sub> , FIREPUMP <sub>2</sub> , FIREPUMP <sub>3</sub>	60III-002	40 CFR Part 60, Subpart III	No changing attributes.
GRP ENG2	SRIC ENGINES	FIREPUMP <sub>1</sub> , FIREPUMP <sub>2</sub> , FIREPUMP <sub>3</sub>	63ZZZZ-002	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
HOHTANK-1	STORAGE TANKS/VESSELS	N/A	R5112-007	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
PORTVC	FLARES	N/A	R1111-001	30 TAC Chapter 111, Visible Emissions	No changing attributes.

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EMERGEN1	EU	6oIII-001	CO	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
EMERGEN1	EU	6oIII-001	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart III	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO <sub>x</sub> emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EMERGEN <sub>1</sub>	EU	60III-001	PM (OPACITY)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3) and §1039.105(b)(1)-(3).	None	None	[G]§ 60.4214(d)
EMERGEN <sub>1</sub>	EU	60III-001	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EMERGEN1	EU	63ZZZZ-001	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
GRP 1	EU	R5112-001	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRP 1	EU	R5112-002	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP 1	EU	R5112-003	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
GRP 1	EU	R5112-004	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRP 1	EU	R5112-005	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP 1	EU	R5112-006	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(2) § 115.112(e)(2)(A) § 115.112(e)(2)(B) § 115.112(e)(2)(C) § 115.112(e)(2)(D) § 115.112(e)(2)(F) [G]§ 115.112(e)(2)(I) § 115.114(a)(1)(A)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(6)(C) § 115.118(a)(7)	§ 115.114(a)(1)(B) § 115.118(a)(3)
GRP 1	EU	60Kb-001	VOC	40 CFR Part 60, Subpart Kb	§ 60.110b(a)	Except for §60.110b(b), this subpart applies to vessels with a capacity greater than or equal to 75 cubic meters (19,800 gal) used to store VOLs for which construction/reconstruction/modification began after 7/23/84.	§ 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(d) § 60.116b(e) § 60.116b(e)(1) § 60.116b(e)(2)(i)	§ 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.116b(d)
GRP 1	EU	60Kb-002	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) § 60.116b(e)(2)(i)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
GRP 1	EU	60Kb-003	VOC	40 CFR Part 60, Subpart Kb	§ 60.110b(a)	Except for §60.110b(b), this subpart applies to vessels with a capacity greater than or equal to 75 cubic meters (19,800 gal) used to store VOLs for which construction/reconstruction/modification began after 7/23/84.	§ 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(d) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.116b(d)
GRP 1	EU	60Kb-004	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
GRP 1	EU	60Kb-005	VOC	40 CFR Part 60, Subpart Kb	§ 60.110b(a)	Except for §60.110b(b), this subpart applies to vessels with a capacity greater than or equal to 75 cubic meters (19,800 gal) used to store VOLs for which construction/reconstruction/modification began after 7/23/84.	§ 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(d) § 60.116b(e) § 60.116b(e)(2)(ii)	§ 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e)(2)(ii)	§ 60.116b(d)

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements  (30 TAC § 122.144)	Reporting Requirements  (30 TAC § 122.145)
GRP 1	EU	60Kb-006	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(2)(ii)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e)(2)(ii)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
GRP 1	EU	60Kb-007	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(C) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) § 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) § 60.116b(e)(2)(i)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
GRP ENG2	EU	60III-002	NMHC and NO <sub>x</sub>	40 CFR Part 60, Subpart III	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NO <sub>x</sub> emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP ENG2	EU	60III-002	PM	40 CFR Part 60, Subpart III	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)
GRP ENG2	EU	63ZZZ-002	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart III, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
HOHTANK-1	EU	R5112-007	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
PORTVC	EU	R1111-001	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None

**Permit Shield**

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## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
FUG 1	N/A	40 CFR Part 61, Subpart J	The pipeline components will not be in benzene service.
FUG 1	N/A	40 CFR Part 61, Subpart V	The pipeline components at the terminal will not be in VHAP service which is defined as a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight a volatile hazardous air pollutant (VHAP).
FUG 2	N/A	40 CFR Part 61, Subpart J	Pipeline components at the terminal will not be in benzene service, per §61.111 definition.
FUG 2	N/A	40 CFR Part 61, Subpart V	Subpart V is not applicable to this terminal because components are not subject to 40 CFR Part 61, Subpart J.

## Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRP 1	105-101, 127-100, 127-131, 210-115, 210-116, 210-117, 210-118, 210-119, 210-120, 210-129, 320-111, 390-102, 390-103, 390-104, 390-105, 390-106, 390-107, 390-108, 390-109, 390-110, 390-112, 390-113, 390-114, 390-125, 390-126, 390-127, 390-128, 390-130, 390-132, 390-133, 390-134, RT-100, RT-200	40 CFR Part 61, Subpart Y	These tanks will not store the benzene products specified in 61.270(a).
GRP DTANK	DTANK-1, DTANK-2, DTANK-3, DTANK-4	30 TAC Chapter 115, Storage of VOCs	Storage tanks have storage capacity less than or equal to 1,000 gallons.
GRP DTANK	DTANK-1, DTANK-2, DTANK-3, DTANK-4	40 CFR Part 60, Subpart Kb	Storage tank has storage capacity less than 75 cubic meters.
GRP OWS	OWS-1, OWS-2	30 TAC Chapter 115, Water Separation	Separators are designed solely to capture stormwater, spills, or exterior surface cleanup waters and are fully covered.
HEAT1	N/A	30 TAC Chapter 111, Incineration	Unit does not burn hazardous waste or solid waste.
HOHTANK-1	N/A	40 CFR Part 60, Subpart Kb	The hot oil tank is less than 75 m3 and is therefore not applicable to 40CFR Part 60, Subpart Kb.

**New Source Review Authorization References**

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**New Source Review Authorization References by Emission Unit..... 33**

## New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

<b>Nonattainment (NA) Permits</b>	
NA Permit No.: N188	Issuance Date: 12/12/2014
<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 95968	Issuance Date: 12/12/2014
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
105-101	DEFR TANK 105-101	95968, N188
127-100	DEFR TANK 127-100	95968, N188
127-131	DEFR TANK 127-131	95968, N188
210-115	DEFR TANK 210-115	95968, N188
210-116	DEFR TANK 210-116	95968, N188
210-117	DEFR TANK 210-117	95968, N188
210-118	DEFR TANK 210-118	95968, N188
210-119	DEFR TANK 210-119	95968, N188
210-120	DEFR TANK 210-120	95968, N188
210-129	DEFR TANK 210-129	95968, N188
320-111	DEFR TANK 320-111	95968, N188
390-102	DEFR TANK 390-102	95968, N188
390-103	DEFR TANK 390-103	95968, N188
390-104	DEFR TANK 390-104	95968, N188
390-105	DEFR TANK 390-105	95968, N188
390-106	DEFR TANK 390-106	95968, N188
390-107	DEFR TANK 390-107	95968, N188
390-108	DEFR TANK 390-108	95968, N188

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
390-109	DEFR TANK 390-109	95968, N188
390-110	DEFR TANK 390-110	95968, N188
390-112	DEFR TANK 390-112	95968, N188
390-113	DEFR TANK 390-113	95968, N188
390-114	DEFR TANK 390-114	95968, N188
390-125	DEFR TANK 390-125	95968, N188
390-126	DEFR TANK 390-126	95968, N188
390-127	DEFR TANK 390-127	95968, N188
390-128	DEFR TANK 390-128	95968, N188
390-130	DEFR TANK 390-130	95968, N188
390-132	DEFR TANK 390-132	95968, N188
390-133	DEFR TANK 390-133	95968, N188
390-134	DEFR TANK 390-134	95968, N188
DTANK-1	DIESEL TANK 1	95968, N188
DTANK-2	DIESEL TANK 2	95968, N188
DTANK-3	DIESEL TANK 3	95968, N188
DTANK-4	DIESEL TANK 4	106.472/09/04/2000
EMERGEN1	EMERGENCY GENERATOR ENGINE 1	95968, N188

### New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
FIREPUMP1	FIREPUMP ENGINE 1	95968, N188
FIREPUMP2	FIREPUMP ENGINE 2	95968, N188
FIREPUMP3	FIREPUMP ENGINE 3	95968, N188
FUG 1	NO. 1 MANIFOLD FUGITIVES	95968, 106.261/11/01/2003, N188
FUG 2	NO. 2 MANIFOLD FUGITIVES	95968, 106.261/11/01/2003, N188
HEAT1	HOT OIL HEATER 1	106.183/09/04/2000
HOHTANK-1	HOT OIL HEATER TANK 1	106.478/09/04/2000
OWS-1	OIL/WATER SEPARATOR 1	95968, N188
OWS-2	OIL/WATER SEPARATOR 2	95968, N188
PORTVC	PORTABLE VAPOR COMBUSTOR	106.263/11/01/2001
RT-100	IFR TANK RT-100	106.478/09/04/2000
RT-200	IFR TANK RT-200	106.478/09/04/2000

**Appendix A**

**Acronym List ..... 37**

## Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	.....	actual cubic feet per minute
AMOC	.....	alternate means of control
ARP	.....	Acid Rain Program
ASTM	.....	American Society of Testing and Materials
B/PA	.....	Beaumont/Port Arthur (nonattainment area)
CAM	.....	Compliance Assurance Monitoring
CD	.....	control device
COMS	.....	continuous opacity monitoring system
CVS	.....	closed-vent system
D/FW	.....	Dallas/Fort Worth (nonattainment area)
DR	.....	Designated Representative
ELP	.....	El Paso (nonattainment area)
EP	.....	emission point
EPA	.....	U.S. Environmental Protection Agency
EU	.....	emission unit
FCAA Amendments	.....	Federal Clean Air Act Amendments
FOP	.....	federal operating permit
GF	.....	grandfathered
gr/100 scf	.....	grains per 100 standard cubic feet
HAP	.....	hazardous air pollutant
H/G/B	.....	Houston/Galveston/Brazoria (nonattainment area)
H <sub>2</sub> S	.....	hydrogen sulfide
ID No.	.....	identification number
lb/hr	.....	pound(s) per hour
MMBtu/hr	.....	Million British thermal units per hour
MRRT	.....	monitoring, recordkeeping, reporting, and testing
NA	.....	nonattainment
N/A	.....	not applicable
NADB	.....	National Allowance Data Base
NO <sub>x</sub>	.....	nitrogen oxides
NSPS	.....	New Source Performance Standard (40 CFR Part 60)
NSR	.....	New Source Review
ORIS	.....	Office of Regulatory Information Systems
Pb	.....	lead
PBR	.....	Permit By Rule
PM	.....	particulate matter
ppmv	.....	parts per million by volume
PSD	.....	prevention of significant deterioration
RO	.....	Responsible Official
SO <sub>2</sub>	.....	sulfur dioxide
TCEQ	.....	Texas Commission on Environmental Quality
TSP	.....	total suspended particulate
TVP	.....	true vapor pressure
U.S.C.	.....	United States Code
VOC	.....	volatile organic compound

**Appendix B**

**Major NSR Summary Table..... 39**

## Major NSR Summary Table

Permit Number: 95968/N188		Issuance Date: 12/12/2014					
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
<b>Tank Group 1</b>							
390-103	DEFR Tank 390-103	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-103 MSS	DEFR Tank 390-103 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-104	DEFR Tank 390-104	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-104 MSS	DEFR Tank 390-104 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-105	DEFR Tank 390-105	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-105 MSS	DEFR Tank 390-105 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-112	DEFR Tank 390-112	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-112 MSS	DEFR Tank 390-112 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-113	DEFR Tank 390-113	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-113 MSS	DEFR Tank 390-113 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-114	DEFR Tank 390-114	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-114 MSS	DEFR Tank 390-114 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
210-115	DEFR Tank 210-115	VOC	10.31	1.89	2, 7	2, 7, 13, 24	2
		Benzene	0.31	0.06	2, 7	2, 7, 13, 24	2
210-115 MSS	DEFR Tank 210-115 Uncontrolled	VOC	259.20	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	7.78	--	9, 10, 12	9, 10, 11, 12, 13, 24	
210-116	DEFR Tank 210-116	VOC	10.31	1.89	2, 7	2, 7, 13, 24	2
		Benzene	0.31	0.06	2, 7	2, 7, 13, 24	2
210-116 MSS	DEFR Tank 210-116 Uncontrolled	VOC	259.20	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	7.78	--	9, 10, 12	9, 10, 11, 12, 13, 24	
210-119	DEFR Tank 210-119	VOC	10.31	1.89	2, 7	2, 7, 13, 24	2
		Benzene	0.31	0.06	2, 7	2, 7, 13, 24	2
210-119 MSS	DEFR Tank 210-119 Uncontrolled	VOC	259.20	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	7.78	--	9, 10, 12	9, 10, 11, 12, 13, 24	
210-120	DEFR Tank 210-120	VOC	10.31	1.89	2, 7	2, 7, 13, 24	2
		Benzene	0.31	0.06	2, 7	2, 7, 13, 24	2
210-120 MSS	DEFR Tank 210-120 Uncontrolled	VOC	259.20	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	7.78	--	9, 10, 1,	9, 10, 11, 12, 13, 24	
	Tank Group 1 VOC and Benzene Compliance Caps (Production Only)	VOC	--	16.88			
		Benzene	--	0.38			
<b>Tank Group 2</b>							
390-102	DEFR Tank 390-102	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-102 MSS	DEFR Tank 390-102 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-106	DEFR Tank 390-106	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
390-106 MSS	DEFR Tank 390-106 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-107	DEFR Tank 390-107	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-107 MSS	DEFR Tank 390-107 Uncontrolled	VOC	367.47		9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03		9, 10, 12	9, 10, 11, 12, 13, 24	
390-108	DEFR Tank 390-108	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-108 MSS	DEFR Tank 390-108 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-109	DEFR Tank 390-109	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-109 MSS	DEFR Tank 390-109 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-110	DEFR Tank 390-110	VOC	7.57	2.35	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-110 MSS	DEFR Tank 390-110 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
320-111	DEFR Tank 320-111	VOC	8.40	2.25	2, 7	2, 7, 13, 24	2
		Benzene	0.25	0.07	2, 7	2, 7, 13, 24	2
320-111 MSS	DEFR Tank 320-111 Uncontrolled	VOC	326.70	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	9.81	--	9, 10, 12	9, 10, 11, 12, 13, 24	
210-117	DEFR Tank 210-117	VOC	10.31	1.89	2, 7	2, 7, 13, 24	2
		Benzene	0.31	0.06	2, 7	2, 7, 13, 24	2
210-117 MSS	DEFR Tank 210-117 Uncontrolled	VOC	259.20	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	7.78	--	9, 10, 12	9, 10, 11, 12, 13, 24	
210-118	DEFR Tank 210-118	VOC	10.31	1.89	2, 7	2, 7, 13, 24	2
		Benzene	0.31	0.06	2, 7	2, 7, 13, 24	2

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
210-118 MSS	DEFR Tank 210-118 Uncontrolled	VOC	259.20	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	7.78	--	9, 10, 12	9, 10, 11, 12, 13, 24	
127-100	DEFR Tank 127-100	VOC	13.17	1.51	2, 7	2, 7, 13, 24	2
		Benzene	0.40	0.04	2, 7	2, 7, 13, 24	2
127-100 MSS	DEFR Tank 127-100 Uncontrolled	VOC	196.79	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	5.91	--	9, 10, 12	9, 10, 11, 12, 13, 24	
105-101	DEFR Tank 105-101	VOC	14.45	1.40	2, 7	2, 7, 13, 24	2
		Benzene	0.44	0.04	2, 7	2, 7, 13, 24	2
105-101 MSS	DEFR Tank 105-101 Uncontrolled	VOC	177.52	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	5.33	--	9, 10, 12	9, 10, 11, 12, 13, 24	
	Tank Group 2 VOC and Benzene Compliance Caps (Production Only)	VOC	--	18.78			
		Benzene	--	0.69			
<b>Tank Group 3</b>							
390-130	DEFR Tank 390-130	VOC	7.58	2.60	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.07	2, 7	2, 7, 13, 24	2
390-130 MSS	DEFR Tank 390-130 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-132	DEFR Tank 390-132	VOC	7.56	2.19	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.05	2, 7	2, 7, 13, 24	2
390-132 MSS	DEFR Tank 390-132 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-133	DEFR Tank 390-133	VOC	7.56	2.19	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.05	2, 7	2, 7, 13, 24	2
390-133 MSS	DEFR Tank 390-133 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-134	DEFR Tank 390-134	VOC	7.56	2.19	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.05	2, 7	2, 7, 13, 24	2

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
390-134 MSS	DEFR Tank 390-134 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-128	DEFR Tank 390-128	VOC	7.56	2.19	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.05	2, 7	2, 7, 13, 24	2
390-128 MSS	DEFR Tank 390-128 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-125	DEFR Tank 390-125	VOC	7.56	2.19	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.05	2, 7	2, 7, 13, 24	2
390-125 MSS	DEFR Tank 390-125 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-126	DEFR Tank 390-126	VOC	7.56	2.19	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.05	2, 7	2, 7, 13, 24	2
390-126 MSS	DEFR Tank 390-126 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
390-127	DEFR Tank 390-127	VOC	7.56	2.19	2, 7	2, 7, 13, 24	2
		Benzene	0.23	0.05	2, 7	2, 7, 13, 24	2
390-127 MSS	DEFR Tank 390-127 Uncontrolled	VOC	367.47	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	11.03	--	9, 10, 12	9, 10, 11, 12, 13, 24	
210-129	DEFR Tank 210-129	VOC	10.29	1.71	2, 7	2, 7, 13, 24	2
		Benzene	0.31	0.04	2, 7	2, 7, 13, 24	2
210-129 MSS	DEFR Tank 210-129 Uncontrolled	VOC	259.20	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	7.78	--	9, 10, 12	9, 10, 11, 12, 13, 24	
127-131	DEFR Tank 127-131	VOC	13.17	1.43	2, 7	2, 7, 13, 24	2
		Benzene	0.40	0.03	2, 7	2, 7, 13, 24	2
127-131 MSS	DEFR Tank 127-131 Uncontrolled	VOC	196.79	--	9, 10, 12	9, 10, 11, 12, 13, 24	
		Benzene	5.91	--	9, 10, 12	9, 10, 11, 12, 13, 24	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
	Tank Group 3 VOC and Benzene Compliance Caps (Production only)	VOC	--	16.80			
		Benzene	--	0.49			
<b>MSS Operations</b>							
	Tank Groups 1 and 2 MSS Uncontrolled VOC and Benzene Compliance Subcaps (Tank MSS Only)	VOC	--	6.22			
		Benzene	--	0.36			
	Tank Group 3 Plus 390-130 MSS Uncontrolled VOC and Benzene Compliance Subcaps (Tank MSS Only)	VOC	--	2.35			
		Benzene	--	0.08			
MSS-1	Other MSS	VOC	92.66	--	15, 19	14, 15, 16, 17, 19, 21, 24	
		Benzene	2.78	--	15, 19	14, 15, 16, 17, 19, 21, 24	
		NO <sub>x</sub>	3.60	--	15, 19	14, 15, 16, 17, 19, 21, 24	
		CO	46.32	--	15, 19	14, 15, 16, 17, 19, 21, 24	
PORTVC	Portable Vapor Combustor (4 vapor combustors running simultaneously) for All Sitewide Tank and Other MSS	VOC	156.16	--	12, 15, 20, 21	12, 14, 15, 16, 17, 20, 21	
		Benzene	1.64	--	12, 15, 20, 21	12, 14, 15, 16, 17, 20, 21	
		NO <sub>x</sub>	3.60	--	12, 15, 20, 21	12, 14, 15, 16, 17, 20, 21	
		CO	46.32	--	12, 15, 20, 21	12, 14, 15, 16, 17, 20, 21	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
	Annual MSS Compliance Caps (for All Sitewide Uncontrolled Tank Group MSS, MSS-1, and PORTVC)	VOC	--	14.98			
		Benzene	--	0.62			
		NO <sub>x</sub>	3.60	4.78			
		CO	46.32	53.53			
<b>Equipment Fugitives</b>							
FUG 1	No. 1 Manifold Fugitives	VOC	0.50	2.15	4, 5	4, 5	4
		Benzene	0.03	0.09	4, 5	4, 5	4
FUG 2	No. 2 Manifold Fugitives	VOC	0.03	0.13	6	6	6
		Benzene	0.01	0.01	6	6	6
<b>Oil/Water Separators</b>							
OWS-1	Oil/Water Separator 1	VOC	5.89	0.15			
OWS-2	Oil/Water Separator 2	VOC	5.89	0.15			
<b>Engines</b>							
EMERGEN1	Emergency Generator Engine 1	VOC	0.18	0.01	2	2, 22	
		NO <sub>x</sub>	1.81	0.10	2	2, 22	
		CO	1.52	0.08	2	2, 22	
		SO <sub>2</sub>	1.12	0.06	2	2, 22	
		PM <sub>10</sub>	0.12	0.01	2	2, 22	
		PM <sub>2.5</sub>	0.10	0.01	2	2, 22	
FIREPUMP1	Firepump Engine 1	VOC	0.29	0.12	2	2, 22	
		NO <sub>x</sub>	2.96	1.08	2	2, 22	
		CO	2.48	0.90	2	2, 22	
		SO <sub>2</sub>	1.83	0.66	2	2, 22	
		PM <sub>10</sub>	0.19	0.08	2	2, 22	
		PM <sub>2.5</sub>	0.16	0.06	2	2, 22	
FIREPUMP2	Firepump Engine 2	VOC	0.29	0.12	2	2, 22	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
		NOx	2.96	1.08	2	2, 22	
		CO	2.48	0.90	2	2, 22	
		SO <sub>2</sub>	1.83	0.66	2	2, 22	
		PM <sub>10</sub>	0.19	0.08	2	2, 22	
		PM <sub>2.5</sub>	0.16	0.06	2	2, 22	
FIREPUMP3	Firepump Engine 3	VOC	0.29	0.12	2	2, 22	
		NOx	2.96	1.08	2	2, 22	
		CO	2.48	0.90	2	2, 22	
		SO <sub>2</sub>	1.83	0.66	2	2, 22	
		PM <sub>10</sub>	0.19	0.08	2	2, 22	
		PM <sub>2.5</sub>	0.16	0.06	2	2, 22	
	Annual Engine Compliance Caps for Emergency Generator Engine 1, Firepump Engine 1, Firepump Engine 2, and Firepump Engine 3	VOC	--	0.25			
		NOx	--	2.26			
		CO	--	1.88			
		SO <sub>2</sub>	--	1.38			
		PM <sub>10</sub>	--	0.17			
		PM <sub>2.5</sub>	--	0.13			
<b>Diesel Tanks</b>							
DTANK-1	Diesel Tank 1	VOC	0.06	0.001			
DTANK-2	Diesel Tank 2	VOC	0.06	0.009			
DTANK-3	Diesel Tank 3	VOC	0.06	0.009			
	Annual Diesel Tank Compliance Cap	VOC	--	0.01			

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC
  - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
  - NO<sub>x</sub>
    - total oxides of nitrogen
  - SO<sub>2</sub>
    - sulfur dioxide
  - PM<sub>10</sub>
    - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
  - PM<sub>2.5</sub>
    - particulate matter equal to or less than 2.5 microns in diameter
  - CO
    - carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
AIR QUALITY PERMIT



A Permit Is Hereby Issued To  
**Oil tanking Houston, L.P.**  
Authorizing the Construction and Operation of  
**Appelt Terminal**  
Located at **Houston, Harris County, Texas**  
Latitude 29° 45' 35" Longitude -95° 8' 32"

Permit: 95968 and N188

Revision Date : December 12, 2014

Expiration Date: March 26, 2022

For the Commission

- Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
- Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC 116.120(a), (b) and (c)]
- Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
- Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
- Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 30 TAC 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in Texas Health and Safety Code (THSC) 382.003(3) or violate THSC 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.

## SPECIAL CONDITIONS

Permit Number 95968 and N188

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating requirements specified in the special conditions.

### Federal Requirements

2. These facilities shall comply with all applicable requirements for the following regulations: **(6/2014)**
  - A. U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
    - (1) Subpart A, General Provisions.
    - (2) Subpart Kb, Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
    - (3) Subpart IIII, Stationary Compression Ignition Internal Combustion Engines.
  - B. These facilities shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:
    - (1) Subpart A, General Provisions.
    - (2) Subpart R, Gasoline Distribution Facilities.
    - (3) Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines.
  - C. If any condition of this permit is more stringent than the applicable regulations in this special condition, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

### Leak Detection and Repair Program

3. 28MID is applicable to piping components associated with tank group 1, tank group 2 and No 1 manifold (FUG 1). 28LAER is applicable to piping components associated with tank group 3, tank 390-130 and No 2 manifold (FUG 2). **(6/2014)**

4. Piping, Valves, Connectors, Pumps, Agitators and Compressors- Intensive Directed Maintenance - 28MID (6/2014)

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

- A. The requirements of paragraphs F and G shall not apply (1) where the volatile organic compounds (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68° F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made available upon request.

The exempted components may be identified by one or more of the following methods:

- (1) piping and instrumentation diagram (PID);
  - (2) a written or electronic database or electronic file;
  - (3) color coding;
  - (4) a form of weatherproof identification; or
  - (5) designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, agitators, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above.

- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

- (1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or
  - (2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72-hour period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.
- F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.

An approved gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

- G. All new and replacement pumps, compressors, and agitators shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

All other pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly.

- H. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A leaking component shall be repaired as soon as practicable, but no

later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC § 115.782(c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC §115.782(c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

- I. In lieu of the monitoring frequency specified in paragraph F, valves in gas and light liquid service may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Valves in gas and light liquid service may be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

- J. The percent of valves leaking used in paragraph I shall be determined using the following formula:

$$(Vl + Vs) \times 100/Vt = Vp$$

Where:

Vl = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.

- Vs = the number of valves for which repair has been delayed and are listed on the facility shutdown log.
- Vt = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor valves.
- Vp = the percentage of leaking valves for the monitoring period.

- K. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
  - L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard, or an applicable National Emission Standard for Hazardous Air Pollutants and does not constitute approval of alternative standards for these regulations.
5. If gas or hydraulic testing of new and reworked piping connections and valves at no less than operating pressure is not performed prior to returning the components to service, then they shall be monitored for leaks using an approved gas analyzer within 30 days of the components being returned to service (instead of 15 days as required by Special Condition No.4.F and 4.H) or no later than the next scheduled quarterly monitoring, whichever is sooner.
6. Piping, Valves, Pumps, Agitators, and Compressors - Intensive Directed Maintenance - 28LAER **(10/2014)**

Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment:

- A. The instrument monitoring requirements of paragraphs E, F, and G shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

- (1) piping and instrumentation diagram (PID);
  - (2) a written or electronic database or electronic file;
  - (3) color coding;
  - (4) a form of weatherproof identification; or
  - (5) designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked components shall be so located to be reasonably accessible for leak-checking during plant operation. A difficult-to-monitor component is a component that cannot be inspected without elevating the monitoring personnel more than two meters above a permanent support surface or that requires a permit for confined space entry as defined in 29 CFR §1910.146 (December 1, 1998). An unsafe-to-monitor component is a component that the owner or operator determines is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of conducting the monitoring. Difficult-to-monitor and unsafe-to-monitor components shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in Subparagraph A above. A difficult-to-monitor or unsafe-to-monitor component for which quarterly instrument monitoring is specified may instead be monitored annually. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked

pipng connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance.

Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through. In addition, all connectors shall be monitored by leak-checking for fugitive emissions at least quarterly, except as the monitoring frequency is adjusted in accordance with item D above, using a gas analyzer with a directed maintenance program in accordance with item I below.

In lieu of the quarterly monitoring frequency specified above, connectors may be monitored on a semiannual basis if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

Connectors may then be monitored on an annual basis if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

If the percent of connectors leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

The percent of connectors leaking shall be determined using the following formula:

$$(Cl + Cs) \times 100 / Ct = Cp$$

Where:

- Cl = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.
- Cs = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.
- Ct = the total number of connectors in the facility subject to the quarterly monitoring requirements, as of the last day of the monitoring period, not

including non-accessible and unsafe to monitor connectors.

Cp = the percentage of leaking connectors for the monitoring period.

- F. Valves shall be monitored by leak-checking for fugitive emissions at least quarterly, except as the monitoring frequency is adjusted in accordance with item D above, using a gas analyzer with a directed maintenance program in accordance with items I below. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown. A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph.

In lieu of the quarterly monitoring frequency specified above, valves may be monitored on a semiannual basis if the percent of valves leaking for two consecutive quarterly monitoring periods is less than 0.5 percent. Valves may then be monitored on an annual basis if the percent of valves leaking for two consecutive semiannual monitoring periods is less than 0.5 percent. If the percent of valves leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph.

The percent of valves leaking shall be determined using the following formula:

$$(Vl + Vs) \times 100 / Vt = Vp$$

Where:

- Vl = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.
- Vs = the number of valves for which repair has been delayed and are listed on the facility shutdown log.
- Vt = the total number of valves in the facility subject to the monitoring requirements, as of the last day of

the monitoring period, not including nonaccessible and unsafe-to-monitor valves.

$V_p$  = the percentage of leaking valves for the monitoring period.

- G. Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;
- (1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or
  - (2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with a gas analyzer meeting the requirements of item I below and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with a gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.
- H. All new and replacement pumps, compressors, and agitators shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.
- I. The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved

using methane, than the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained. Replaced components shall be re-monitored within 15 days of being placed back into VOC service.

- J. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Any component found to be leaking by physical inspection (i.e., sight, sound, or smell) shall be repaired or monitored with an approved gas analyzer within 15 days to determine whether the component is leaking in excess of 500 ppmv of VOC. If the component is found to be leaking in excess of 500 ppmv of VOC, it shall be subject to the following repair and replacement requirements. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shut down as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Director and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

- K. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS), and does not constitute approval of alternative standards for these regulations.

#### Storage and Loading of VOC

- 7. All storage tanks are limited to storing gasoline, condensate, blends of condensate containing crude oil, crude oil or blends of crude oil containing petroleum condensate. **(3/2013)**

Storage tanks are subject to the following requirements: The control requirements specified in paragraphs A-D of this condition shall not apply (1) where the VOC has an aggregate partial pressure of less than 0.50 psia at the maximum feed temperature or 95°F, whichever is greater, or (2) to storage tanks smaller than 25,000 gallons.

- A. An internal floating deck or roof or equivalent control shall be installed in all tanks. The 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: (1) a liquid-mounted seal, (2) two continuous seals mounted one above the other, or (3) a mechanical shoe seal.
- B. An open-top tank containing a floating roof (external floating roof tank) which uses double seal or secondary seal technology shall be an approved control alternative to an internal floating roof tank provided the primary seal consists of either a mechanical shoe seal or a liquid-mounted seal, and the secondary seal is rim-mounted. A weathershield is not approvable as a secondary seal unless specifically reviewed and determined to be vapor-tight.
- C. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and seal gap measurements as specified in 40 CFR § 60.113b) Testing and Procedures (as amended at 54 FR 32973, Aug. 11, 1989) to verify fitting and seal integrity. Records shall be maintained of the dates seals were inspected and seal gap

measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.

- D. The floating roof design shall incorporate sufficient flotation to conform to the requirements of American Petroleum Institute Code 650, or an equivalent degree of flotation, except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials.
- E. Uninsulated tank exterior surfaces exposed to the sun shall be white or aluminum. Storage tanks must be equipped with permanent submerged fill pipes.
- F. By the end of the following month, the permit holder shall calculate and maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12 month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

#### Tank Roof Landing Operations

- 8. The following requirements apply to new floating roof tanks:
  - A. Tanks shall be constructed with a sloped bottom and a sump that can be emptied (i.e., “drain dry”: no standing liquid in the tank and sump).
  - B. Tanks shall be constructed or equipped with the capability for connection to a vapor recovery system that routes vapors from the vapor space under the landed roof to a control device.
  - C. The tank’s outlet to the vapor recovery system shall be located at a height from the tank floor no less than 90 percent of the tank roof’s landed height.
- 9. Unless vapors under a floating roof are routed to control or a controlled recovery system, the following requirements apply. Tank roofs may only be landed for changes of tank service, customer termination of the use of the tank, or tank inspection/maintenance for the storage tanks identified in the

MAERT as Tank Group 1, Tank Group 2, and Tank Group 3. Tank roof landings include all operations when the tank floating roof is on its supporting legs. These emissions are subject to the maximum allowable emission rates indicated on the MAERT. The following requirements apply to tank roof landings.

- A. The tank liquid level shall be continuously lowered after the tank floating roof initially lands on its supporting legs until the tank has been drained to the maximum extent practicable without entering the tank (i.e., no standing liquid). Liquid level may be maintained steady for a period of up to two hours if necessary to allow for valve lineups and pump changes necessary to drain the tank. Note: For the purposes of this permit only, standing liquid refers to material in the tank that can be removed using equipment in the tank's permanent configuration. A heel consists of materials (including sludge and sediment) that cannot be pumped out of the tank using the tank pumps, and additional external means would have to be employed to remove the heel.
  
- B. If the VOC partial pressure of the liquid previously stored in the tank is greater than 0.50 psi at 95°F, tank refilling or degassing of the vapor space under the landed floating roof must begin within 24 hours after the tank has been drained unless the vapor under the floating roof is routed to control or a controlled recovery system during this period. The tank shall not be opened except as necessary to set up for degassing and cleaning. Controlled degassing of the vapor space under landed roofs shall be completed as follows:
  - (1) Any gas or vapor removed from the vapor space under the floating roof must be routed to a control device or a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv (or 34,000 ppmv as methane if a TVA 1000 FID or another TCEQ-approved device is used for the concentration measurement) or 10 percent of the LEL. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device or controlled recovery system.
  
  - (2) The vapor space under the floating roof shall be vented using good engineering practice to ensure air contaminants are routed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.

- (3) A volume of purge gas equivalent to twice the volume of the vapor space under the floating roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 10.
  - (4) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.
  - (5) All emissions during the “off-float” period (i.e., the period between the landing and refloating of the roof) shall either 1) be routed to a vapor control device that provides a control efficiency of at least 99.5%, or 2) be vented uncontrolled in accordance with the requirements of Special Condition No. 9.C. **(6/2014)**
- C. Uncontrolled venting of the vapor space below the landed roof shall be performed using one of the following methods:
- (1) Uncontrolled Venting Method No. 1: Prior to uncontrolled venting, the concentration of vapors beneath the landed roof must be less than or equal to 34,000 ppmv as methane. Vapors shall be vented uncontrolled by connecting an exhaust blower to piping that is designed to pull air from the vapor space underneath the landed roof and exhausted at the top of the tank. Additional blowers may or may not be installed on the manways at the bottom of the tank to force fresh air into the vapor space beneath the landed roof. The blower on the top of the tank shall vent vertically from a stack that is at least 60 feet above ground level and has an internal diameter of less than or equal to 20 inches. Simultaneous uncontrolled venting operations using Method 1 are limited to any two tanks at the terminal.
  - (2) Uncontrolled Venting Method No. 2: Prior to uncontrolled venting, the concentration of vapors beneath the landed roof must be less than or equal to 34,000 ppmv as methane. Vapors shall be vented uncontrolled by connecting an exhaust blower to a manway at the bottom of a tank, that routes emissions to a vertical stack beside the tank. The venting stack shall be at least

15 feet above ground level and have an internal diameter of less than or equal to 12 inches. Uncontrolled venting operations are limited to one tank when using Method 2. Furthermore, venting locations are limited to the manways identified in the plot plan submitted with the air quality modeling study in support of the permit application.

- (3) Uncontrolled Venting Method No. 3: Prior to uncontrolled venting, the concentration of vapors beneath the landed roof must be less than or equal to 34,000 ppmv as methane. Vapors shall be vented uncontrolled by connecting a blower to a manway at the bottom of the tank to force fresh air into the vapor space below the landed roof and out the roof vents on top of the storage tank and/or out vertical pipes at the top of the tank. Simultaneous uncontrolled venting operations using Method 3 are limited to any three tanks at the terminal.

- D. Tanks shall not be opened or ventilated without control, except as allowed below until the criteria in Special Condition No. 9.E are satisfied.

To minimize air circulation in the tank vapor space.

- (1) One manway may be opened to allow access to the tank to remove or de-volatilize the remaining liquid. Other manways or access points may be opened as necessary to remove or de-volatilize the remaining liquid. Wind barriers shall be installed at all open manways and access points to minimize air flow through the tank.
- (2) Access points shall be closed when not in use.

- E. The tank may be opened without restriction and ventilated without control after the VOC concentration has been monitored to satisfy the requirements in Special Condition 9.B.
- F. Tanks shall be refilled as rapidly as practicable until the roof is off its legs with the following exception:

Several tanks can be filled at any time based on the maximum combined re-filling emission rate (lb/hr), determined by the following formula derived from the site-specific dispersion modeling:

$$ER_P = 0.315 \times ESL_P,$$

Where:

ERp = maximum emission rate, product re-filled (lb/hr)

ESLp = hourly effects screening level, product re-filled  
( $\mu\text{g}/\text{m}^3$ )

The vapor space below the tank roof is directed to a control device when the tank is refilled until the roof is floating on the liquid. The control device used and the method and locations used to connect the control device shall be recorded. All emissions from the tank being filled must be collected and sent through the control device. The control device vapor collection rate shall always be greater than the tank's refill rate.

- G. The occurrence of each roof landing and the associated emissions shall be recorded and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis. These records shall include at least the following information:
- (1) The identification of the tank and emission point number, and any control devices or recovery systems used to reduce emissions;
  - (2) The reason for the tank roof landing;
  - (3) For the purpose of estimating emissions, the date, time, and other information specified for each of the following events:
    - (a) The roof was initially landed,
    - (b) All standing liquid was pumped from the tank to the extent practical (i.e., all but the heel),
    - (c) Start and completion of controlled degassing, and total volumetric flow,
    - (d) The removal of heel (if conducted),
    - (e) If there is a heel in the tank, VOC partial pressure of liquid, start and completion of uncontrolled degassing, and total volumetric flow,
    - (f) Refilling commenced, liquid filling the tank, and the volume necessary to float the roof; and

- (g) Tank roof off supporting legs, floating on liquid;
  - (4) The estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events c and g with the data and methods used to determine it. The emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids" dated November 2006 and the permit application.
10. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.
- A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR Part 60, Appendix A) with the following exceptions:
    - (1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded. If the RF of the VOC (or mixture of VOCs) to be monitored is greater than 2.0, the VOC concentration shall be determined as follows:  
  
$$\text{VOC Concentration} = \text{Concentration as read from the instrument} * \text{RF}$$

In no case should a calibration gas be used such that the RF of the VOC (or mixture of VOCs) to be monitored is greater than 5.0.
    - (2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. As an alternative the VOC concentration may be monitored over a five-minute period with an instrument designed to continuously measure concentration and record the highest concentration read. The highest measured VOC concentration shall be recorded and shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

- B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.
- (1) The air contaminant concentration measured is less than 80 percent of the range of the tube. If the maximum range of the tube is greater than the release concentration defined in (3), the concentration measured is at least 20 percent of the maximum range of the tube.
  - (2) The tube is used in accordance with the manufacturer's guidelines.
  - (3) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:  
  
measured contaminant concentration (ppmv) < release concentration.

Where the release concentration is:

10,000\*mole fraction of the total air contaminants present that can be detected by the tube.

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.

Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.

- C. Lower explosive limit measured with a lower explosive limit detector.
- (1) The detector shall be calibrated within 30 days of use with a certified pentane gas standard at 25% of the lower explosive limit (LEL) for pentane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
  - (2) A functionality test shall be performed on each detector within 24 hours of use with a certified gas standard at 25% of the LEL for pentane. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.
  - (3) A certified methane gas standard equivalent to 25% of the LEL for pentane may be used for calibration and functionality tests

provided that the LEL response is within 95% of that for pentane.

11. Simultaneous control venting operations are limited to any four domed external floating roof (DEFR) tanks at the facility. **(3/2013)**
12. The Portable Vapor Combustor (EPN PORTVC) shall achieve 99.5 % destruction efficiency of the waste gas stream directed to it. This shall be ensured by maintaining the temperature in, or immediately downstream of, the combustion chamber above 1400 degrees Fahrenheit. **(6/2014)**

The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of  $\pm 2$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 2.5^{\circ}\text{C}$ .

Quality assured (or valid) data must be generated when the VCU is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the VCU operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

The Portable Vapor Combustor shall be operated with no visible emissions and have a constant pilot flame during all times waste gas could be directed to it. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.

Before using the Portable Vapor Combustor, the permit holder shall (1) confirm with the company from whom it rents the device that the device has been stack tested within the previous 60 months in accordance with the requirements of 30 TAC Chapter 115, Subchapter F, Division 3, and (2) record the date of the device's most recent stack test.

#### Chemical Flexibility (10/2014)

13. Except as provided for below, the use of compounds is limited to those identified in the permit application, PI-1 dated June 28, 2013. New compounds may be added through the use of the procedure below, 30 TAC Chapter 106, or 30 TAC Chapter 116.

- A. Short-term (pounds per hour [lb/hr]) and annual (TPY) emissions and calculations shall be completed for each chemical at each affected source. Emission rates (ER) shall be calculated in accordance with the following methods, as documented in the permit amendment application (PI-1 dated June 28, 2013): AP-42 emission factors and equations to determine tank and loading emissions; TCEQ fugitive emission factors with appropriate control as identified in the guidance document, "Equipment Leak Fugitives" to determine piping fugitive emissions. The calculated ER shall not exceed the maximum allowable emissions rate at any emission point.
- B. The Effect Screening Level (ESL) for the compound shall be obtained from the current TCEQ ESL list or by written request to the TCEQ Toxicology Division.
- C. The new compounds or chemicals shall serve the same basic function and the emissions shall be from the same location as the emissions from the current materials.
- D. All the compounds within a new mixture are known, i.e. the weight percentages of the ingredients add to 100 percent or more.
- E. Any air contaminant compound in a new mixture is exempt from the requirements of subparagraph F. below if it meets one of the following conditions:

- (1) It is emitted at a rate and has a short-term Effects Screening Level (ESL) as stated in the following table; or

Emission Rate (lbs/hr)	Short-term ESL ( $\mu\text{g}/\text{m}^3$ )
$\leq 0.04$	$\geq 2 \ \& \ < 500$
$\leq 0.10$	$\geq 500 \ \& \ < 3,500$
$\leq 0.40$	$\geq 3,500$

- (2) It has a true vapor pressure at 68°F of less than 0.01 mm Hg.
- F. For all other new or increased air contaminants the following procedure shall be completed:
  - (1) Determine the emission rate (ER) of each air contaminant ingredient including emissions of the same air contaminant from currently authorized materials that may be emitted at the same time from each emission point.

- (2) Multiply the emission rate of the air contaminant by the unit impact multiplier for each emission point from the following table to determine the off-property impact (Ground Level Concentration (GLC)) for each emission point.

Emission Point	Unit Impact ( $\mu\text{g}/\text{m}^3$ per lb/hr)
Tanks	88.19
Manifolds	43.70
Oil/Water Separator	1,537.52
Vapor Combustors	7.38
Uncontrolled Venting Method 1 (Blower at Top of Tank)	10.41
Uncontrolled Venting Method 2 (Blower at Bottom of Tank)	26.17
Uncontrolled Venting Method 3 (Vents at Top of Tank)	37.41
Vacuum Trucks (Tanks)	202.96
Passive Ventilation (Openings)	193.18
Controlled Venting (Tanks)	28.13
Pipeline Activities - Non-Pigging	244.99
Pipeline Activities - Pigging	6,283.90
Manifold Activities: Aerosol Usage	43.70
Vacuum Trucks (Manifolds)	1,530.37
Solid Waste Drumming	197.56
Temporary Storage and Disposal: Roll-Off Boxes	636.15
Temporary Storage and Disposal: Sump Cleaning and Liquid Drumming	43.70
Frac Tank Loading or Washing	43.70
Oil/Water Separator Cleaning	0.39

- (3) Sum the impacts from each emission point/emission point group to determine a total off-property impact (Total  $\text{GLC}_{\text{MAX}}$ ) for the new or increased air contaminant.

- (4) Compare the total off-property impact to the ESL for the air contaminant as follows:

$$\text{Total GLC}_{\text{MAX}} \leq \text{ESL}_{\text{NEW}}$$

Where:

$\text{Total GLC}_{\text{MAX}}$  = the sum of the GLCs from each emission point.

$\text{ESL}_{\text{new}}$  = short-term ESL of new ingredient air contaminant from the most current ESL list published by the TCEQ or as specifically derived by TCEQ Toxicology Division. The ESL shall be obtained in writing prior to the use of the new or increased air contaminant.

- G. Short-term emission rates from new or increased air contaminants shall not cause any increases in air contaminant category annual emission rates as listed on the maximum allowable emission rates table (MAERT).
- H. The permit holder shall maintain records of the information below and the demonstrations in steps A through C above. The following documentation is required for each compound:
- (1) Chemical name(s), composition, and chemical abstract registry number if available.
  - (2) True vapor pressure at maximum hourly and annual average storage temperature.
  - (3) Molecular weight.
  - (4) Storage tanks, loading areas, and fugitive areas where the material is to be handled and the emission control device to be utilized.
  - (5) Date new compound handling commenced.
  - (6) Material Safety Data Sheet.
  - (7) Maximum concentration of the chemical in mole percent (or in weight percent for fugitive areas) in the affected facilities.

Planned Maintenance, Start-Up, and Shut-Down

14. This permit authorizes the emissions from the facilities identified in the MSS Activity Summary (Attachment C) attached to this permit. **(6/2014)**

Attachment A identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Attachment A shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Attachment A must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

Routine maintenance activities, as identified in Attachment B may be tracked through the work orders or equivalent. Emissions from activities identified in Attachment B shall be calculated using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

The performance of each planned MSS activity not identified in Attachments A or B and the emissions associated with it shall be recorded and include at least the following information:

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- D. the date and time of the MSS activity and its duration;
- E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

By the end of the following month, all MSS emissions shall be summed and the rolling 12-month emissions shall be updated on a monthly basis.

15. Process units and facilities, with the exception of those identified in Special Conditions 9, 17, and Attachment A shall be depressurized, emptied,

degassed, and placed in service in accordance with the following requirements. **(6/2014)**

- A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.
- B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.
- C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
- D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and

uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.

- (1) For MSS activities identified in Attachment B, the following option may be used in lieu of (2) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.
- (2) The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 10. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv (or 34,000 ppmv as methane if a TVA 1000 FID or another TCEQ-approved device is used for the concentration measurement) or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.

E. Gases and vapors with VOC partial pressure greater than 0.50 psi may be vented directly to atmosphere if all the following criteria are met:

- (1) It is not technically practicable to depressurize or degas, as applicable, into the process.
- (2) There is not an available connection to a plant control system (flare).

- (3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.
16. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site: **(6/2014)**
  - A. Vacuum pumps and blowers shall not be operated on trucks containing or vacuuming liquids with VOC partial pressure greater than 0.50 psi at 95°F unless the vacuum/blower exhaust is routed to a control device or a controlled recovery system.
  - B. Equip fill line intake with a “duckbill” or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
  - C. A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
    - (1) Prior to initial use, identify any liquid in the truck. Record the liquid level and document that the VOC partial pressure is less than 0.50 psi if the vacuum exhaust is not routed to a control device or a controlled recovery system. After each liquid transfer, identify the liquid transferred and document that the VOC partial pressure is less than 0.50 psi if the vacuum exhaust is not routed to a control device or a controlled recovery system.
    - (2) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a “duckbill” or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
    - (3) If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer, VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition 10.
    - (4) The volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
  - D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of

liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.

- E. If the VOC partial pressure of all the liquids vacuumed into the truck is less than 0.10 psi, this shall be recorded when the truck is unloaded or leaves the plant site and the emissions may be estimated as the maximum potential to emit for a truck in that service as documented in the permit application. The recordkeeping requirements in A through D of this special condition do not apply.
17. The following requirements apply to frac, or temporary, tanks and vessels used in support of MSS activities. **(6/2014)**
- A. The exterior surfaces of these tanks/vessels that are exposed to the sun shall be white or aluminum effective May 1, 2013. This requirement does not apply to tanks/vessels that only vent to atmosphere when being filled.
  - B. These tanks/vessels must be covered and equipped with fill pipes that discharge within 6 inches of the tank/vessel bottom.
  - C. These requirements do not apply to vessels storing less than 100 gallons of liquid that are closed such that the vessel does not vent to atmosphere.
  - D. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all frac tanks during the previous calendar month and the past consecutive 12 month period. The record shall include tank identification number, dates put into and removed from service, control method used, tank capacity and volume of liquid stored in gallons, name of the material stored, VOC molecular weight, and VOC partial pressure at the estimated monthly average material temperature in psia. Filling emissions for tanks shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations" and standing emissions determined using: the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Storage Tanks."
  - E. If the tank/vessel is used to store liquid with VOC partial pressure less than 0.10 psi at 95°F, records may be limited to the days the tank is in service and the liquid stored. Emissions may be estimated based upon the potential to emit as identified in the permit application.

18. MSS activities represented in the permit application may be authorized under new permit by rule only if the procedures, emission controls, monitoring, and recordkeeping are the same as those required by this permit. **(6/2014)**
19. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device. **(6/2014)**

Controlled recovery systems identified in this permit shall be directed to an operating process or to a collection system that is vented through a control device meeting the requirements of this permit condition.

A. Carbon Adsorption System (CAS).

- (1) The CAS shall consist of 2 carbon canisters in series with adequate carbon supply for the emission control operation.
- (2) The CAS shall be sampled downstream of the first can and the concentration recorded at least once every hour of CAS run time to determine breakthrough of the VOC. The sampling frequency may be extended using either of the following methods:
  - (a) It may be extended to up to 30 percent of the minimum potential saturation time for a new can of carbon. The permit holder shall maintain records including the calculations performed to determine the minimum saturation time.
  - (b) The carbon sampling frequency may be extended to longer periods based on previous experience with carbon control of a MSS waste gas stream. The past experience must be with the same VOC, type of facility, and MSS activity. The basis for the sampling frequency shall be recorded. If the VOC concentration on the initial sample downstream of the first carbon canister following a new polishing canister being put in place is greater than 100 ppmv above background, it shall be assumed that breakthrough occurred while that canister functioned as the final polishing canister and a permit deviation shall be recorded.
- (3) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 10.A or 10.B.

- (4) Breakthrough is defined as the highest measured VOC concentration at or exceeding 100 ppmv above background. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within four hours. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.
  - (5) Records of CAS monitoring shall include the following:
    - (a) Sample time and date.
    - (b) Monitoring results (ppmv).
    - (c) Canister replacement log.
  - (6) Single canister systems are allowed if the time the carbon canister is in service is limited to no more than 30 percent of the minimum potential saturation time. The permit holder shall maintain records for these systems, including the calculations performed to determine the saturation time. The time limit on carbon canister service shall be recorded and the expiration date attached to the carbon can.
- B. Internal Combustion Engine.
- (1) The internal combustion engine shall have a VOC destruction efficiency of at least 99 percent.
  - (2) The engine must have been stack tested with butane or propane to confirm the required destruction efficiency within the period specified in part iii below. VOC shall be measured in accordance with the applicable United States Environmental Protection Agency (EPA) Reference Method during the stack test and the exhaust flow rate may be determined from measured fuel flow rate and measured oxygen concentration. A copy of the stack test report shall be maintained with the engine. There shall also be documentation of acceptable VOC emissions following each occurrence of engine maintenance that may reasonably be expected to increase emissions including oxygen sensor replacement and catalyst cleaning or replacement. Stain tube indicators specifically designed to measure VOC concentration shall be acceptable for this documentation, provided a hot air probe or equivalent device is used to prevent error due to high

stack temperature, and three sets of concentration measurements are made and averaged. Portable VOC analyzers meeting the requirements of Special Condition 10 are also acceptable for this documentation.

- (3) The engine shall be operated and monitored as specified below.
- (a) If the engine is operated with an oxygen sensor-based air-to-fuel ratio (AFR) controller, documentation for each AFR controller that the manufacturer's or supplier's recommended maintenance has been performed, including replacement of the oxygen sensor as necessary for oxygen sensor-based controllers shall be maintained with the engine. The oxygen sensor shall be replaced at least quarterly in the absence of a specific written recommendation. The engine must have been stack tested within the past 12 months in accordance with part (b) of this condition.

The test period may be extended to 24 months if the engine exhaust is sampled once an hour when waste gas is directed to the engine using a detector meeting the requirements of Special Condition 10.A. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the engine. The concentrations shall be recorded and the MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background.

- (b) If an oxygen sensor-based AFR controller is not used, the engine exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the engine. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the engine. The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 10.A. An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and

time of all alarms and the actions taken shall be recorded. The engine must have been stack tested within the past 24 months in accordance with part ii of this condition.

- C. A liquid scrubbing system may be used upstream of carbon adsorption. A single carbon can or a liquid scrubbing system may be used as the sole control device if the requirements below are satisfied.
- (1) The exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the scrubber.
  - (2) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 10.A.
  - (3) An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible when the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and time of all alarms and the actions taken shall be recorded.
- D. A closed loop refrigerated vapor recovery system
- (1) The vapor recovery system shall be installed on the facility to be degassed using good engineering practice to insure air contaminants are flushed from the facility through the refrigerated vapor condensers and back to the facility being degassed. The vapor recovery system and facility being degassed shall be enclosed except as necessary to insure structural integrity (such as roof vents on a floating roof tank).
  - (2) VOC concentration in vapor being circulated by the system shall be sampled and recorded at least once every 4 hours at the inlet of the condenser unit with an instrument meeting the requirements of Special Condition 10.
  - (3) The quantity of liquid recovered from the tank vapors and the tank pressure shall be monitored and recorded each hour. The liquid recovered must increase with each reading and the tank pressure shall not exceed one inch water pressure while the system is operating.
20. The following requirements apply to capture systems for the PORTVC.  
**(6/2014)**

- A. Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system;
- B. The control device shall not have a bypass.

However; if there is a bypass for the control device, inspect the valves once a month, verifying that the position of the valves and the condition of the car seals that prevent flow out the bypass.

A bypass does not include authorized analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves if the pressure between the disc and relief valve is monitored and recorded at least weekly. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service per this permit.

- C. If any of the above inspections is not satisfactory, the permit holder shall promptly take necessary corrective action. Records shall be maintained documenting the performance and results of the inspections required above.
21. Only for equipment whose installation has begun before the issue of the amendment for Tank Group 3, Special Condition 14.A through 14.D shall become effective after 180 days of issue. MAERT emission limits shall apply. Emissions shall be estimated using good engineering practice and methods to provide reasonably accurate representations for emissions. The basis used for determining the quantity of air contaminants to be emitted shall be recorded. The permit holder may maintain abbreviated records of emissions from Attachment A and B activities as allowed in Special Condition 14 rather than documenting all the information required by Special Condition 14.A through 14.D. **(6/2014)**

### Engines

22. Emergency Generator Engine 1 (EPN EMERGEN1) shall not be operated more than 100 hours a year. Firepump Engine 1 (EPN FIREPUMP1) shall not be operated more than 720 hours a year. Firepump Engine 2 (EPN FIREPUMP2) shall not be operated more than 720 hours a year. Firepump Engine 3 (EPN FIREPUMP3) shall not be operated more than 720 hours a year. The combined hours of operation of Firepump Engine 1, Firepump Engine 2, and Firepump Engine 3 shall not exceed 1440 hours a year. **(6/2014)**

Netting and Offsets

23. This Nonattainment New Source Review (NNSR) permit is issued/approved based on the requirement that the permit holder obtain and provide 21.92 tons per year (TPY) of (VOC/NO<sub>x</sub>) emission credits (ECs) and or discrete emission credits (DECs) to offset the 16.86 tpy VOC project emission increase for the new facilities authorized by this permit at a ratio of 1.3 to 1, through participation in the TCEQ Emission Banking and Trading (EBT) Program. The permit holder shall specifically identify the amount of ECs or DECs, by TCEQ Emission Reduction Credit Certificate (ERCC) number. For up to the first two years of operation, the VOC emission increase for each new facility listed below and up to 21.92 tons per year (TPY) of VOC discrete emission credits (DECs) will be used from the TCEQ discrete emission reduction certificate Number D-3027. Thereafter, additional ECs or DEC shall be obtained from the TCEQ EBT Program, and a permit alteration or amendment be filed with the TCEQ Air Permits Division (with a copy to the TCEQ Regional Office), to specifically identify the credits being used to continue to operate in future years (beyond the initial amount of discrete emission credits utilized during the first two years of operation). **(12/2014)**

<b>Tank Group 3</b>			
<b>390-132</b>	DEFR Tank 390-132	VOC (TPY)	2.19
<b>390-133</b>	DEFR Tank 390-133	VOC (TPY)	2.19
<b>390-134</b>	DEFR Tank 390-134	VOC (TPY)	2.19
<b>390-128</b>	DEFR Tank 390-128	VOC (TPY)	2.19
<b>390-125</b>	DEFR Tank 390-125	VOC (TPY)	2.19
<b>390-126</b>	DEFR Tank 390-126	VOC (TPY)	2.19
<b>390-127</b>	DEFR Tank 390-127	VOC (TPY)	2.19
<b>210-129</b>	DEFR Tank 210-129	VOC (TPY)	1.71
<b>127-131</b>	DEFR Tank 127-131	VOC (TPY)	1.43
	<b>Tank Group 3 (all tanks above) not to exceed --&gt;</b>	VOC (TPY)	<u>14.2</u>

<b>FUG 2</b>	No. 2 Manifold Fugitives	VOC (TPY)	0.13
<b>FIREPUMP3</b>	Firepump Engine 3	VOC (TPY)	0.12
<b>MSS</b>	MSS Tank Group 3 MSS VOC Compliance Subcaps (Tank MSS Only)	VOC (TPY)	2.41
Project Increase Total for Permit 95968 Amendment dated (June 28, 2013)		VOC (TPY)	<b>16.86</b>
Project Required Emission Credits for Permit 95968 Amendment dated (June 28, 2013). This is 1.3 times the "Project Increase Total." [ 16.86 x 1.3 ] =		VOC (TPY)	<b>21.92</b>

Recordkeeping

24. The permit holder shall keep the following records: **(6/2014)**
- A. Records demonstrating compliance with the federal requirements listed in Special Condition No. 2.
  - B. Fugitive monitoring records required by Special Condition No. 3.
  - C. Storage tank emission records required by Special Condition 7.F.
  - D. Storage tank roof landing emission records required by Special Condition No. 9.
  - E. Calibration and VOC monitoring records required by Special Condition No. 10.A.
  - F. Tank degassing records to demonstrate compliance with Special Condition No. 11
  - G. VCU temperature monitoring records required by Special Condition No. 12.
  - H. Operating hours of the fire pumps and emergency generator per SC 22.

The permit holder shall retain all records for a minimum of two years and make them available to TCEQ personnel upon request.

25. This permit shall expire ten years after the issuance date, March 26, 2012, unless renewed as provided in Section 383.055 of the Texas Clean Air Act.

Dated: December 12, 2014

Permit 95968 and N188

Attachment A

INHERENTLY LOW EMITTING ACTIVITIES

Activity	Emissions				
	VOC	NO <sub>x</sub>	CO	PM	H <sub>2</sub> S/SO <sub>2</sub>
Aerosol Cans	X			X	
Temporary Storage and Disposal that is limited to Management of sludge from pits, ponds, sumps, and water conveyances	X				
Meter Proving	X				
Inhibitor Addition	X				
Roll-Off Boxes for wastewater sludge	X				
Open for Visual Inspections (residue Service)	X				
Open Hatches for Visual IFR Inspections While in Active Service	X				
Open Manway for Visual Inspections While in Residue Service	X				
API Separator Opening – Cover Removal, Inspection, etc.	X				
Liquid Drumming	X				
Hose and Line Fills (and associated emissions from a catch bucket or drip pan)	X				

Dated: June 30, 2014

Permit 95968 and N188

Attachment B

ROUTINE MAINTENANCE ACTIVITIES

Pump Maintenance/Replacement Cleaning/Seal Repair  
Valve Maintenance/Replacement Cleaning  
Gasket Replacement (and associated emissions from a catch bucket or drip pan)  
Hose and Line Draining, Clearing, and Drying (and associated emissions from a catch bucket or drip pan)  
Pipeline Fills  
Pump Priming  
Pipeline Clearing, Venting, and Draining (Removal of Residual Product)  
Pipeline Washing (With and Without a PIG)  
Pipeline and Hose Bleeding Pressure (Residue Service)  
PIG Installation and Removal  
Pipe Sample Collection  
Agitator & Mixer Maintenance, Replacement, Repairs  
High-Level Alarms Installation, Repair, Removal  
Pressure Relief Valves Maintenance/Replacement  
Radar Gauges Installation, Repair, Removal  
Vent Replacement, Testing, Cleaning, and Inspection  
Solid Waste Drumming

Dated: June 30, 2014

Permit 95968 and N188

Attachment C

MSS ACTIVITY SUMMARY

<b>Facilities</b>	<b>Description</b>	<b>Emissions Activity</b>	<b>EPN</b>
all floating roof tanks	degas of tank with landed roof	controlled degassing	PORTVC
all floating roof tanks	tank roof landing (uncontrolled venting and tank refilling)	operation with landed roof	Respective Tank Uncontrolled MSS EPN
Vacuum truck operations	process unit purge/degas/drain	Vent to control	MSS-1
all tanks	tank opening and cleaning	Ventilation (either passive or active to control)	MSS-1
all tanks including frac tanks	tank cleaning	cleaning activity and solvents	MSS-1
API separator Cleanout	process unit purge/degas/drain	vent to atmosphere	MSS-1
see Attachment A	Inherently low emitting activities	see Attachment A	MSS-1
See Attachment B	Routine maintenance activities	See Attachment B	MSS-1

Dated: June 30, 2014

Emission Sources - Maximum Allowable Emission Rates

Permit Number 95968 and N188

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
<b>Tank Group 1</b>				
390-103	DEFR Tank 390-103	VOC	7.57	2.35
		Benzene	0.23	0.07
390-103 MSS	DEFR Tank 390-103 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-104	DEFR Tank 390-104	VOC	7.57	2.35
		Benzene	0.23	0.07
390-104 MSS	DEFR Tank 390-104 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-105	DEFR Tank 390-105	VOC	7.57	2.35
		Benzene	0.23	0.07
390-105 MSS	DEFR Tank 390-105 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-112	DEFR Tank 390-112	VOC	7.57	2.35
		Benzene	0.23	0.07
390-112 MSS	DEFR Tank 390-112 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-113	DEFR Tank 390-113	VOC	7.57	2.35
		Benzene	0.23	0.07
390-113 MSS	DEFR Tank 390-113 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-114	DEFR Tank 390-114	VOC	7.57	2.35
		Benzene	0.23	0.07
390-114 MSS	DEFR Tank 390-114 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
210-115	DEFR Tank 210-115	VOC	10.31	1.89
		Benzene	0.31	0.06

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
210-115 MSS	DEFR Tank 210-115 Uncontrolled	VOC	259.20	--
		Benzene	7.78	--
210-116	DEFR Tank 210-116	VOC	10.31	1.89
		Benzene	0.31	0.06
210-116 MSS	DEFR Tank 210-116 Uncontrolled	VOC	259.20	--
		Benzene	7.78	--
210-119	DEFR Tank 210-119	VOC	10.31	1.89
		Benzene	0.31	0.06
210-119 MSS	DEFR Tank 210-119 Uncontrolled	VOC	259.20	--
		Benzene	7.78	--
210-120	DEFR Tank 210-120	VOC	10.31	1.89
		Benzene	0.31	0.06
210-120 MSS	DEFR Tank 210-120 Uncontrolled	VOC	259.20	--
		Benzene	7.78	--
	Tank Group 1 VOC and Benzene Compliance Caps (Production Only)	VOC	--	16.88
		Benzene	--	0.38
<b>Tank Group 2</b>				
390-102	DEFR Tank 390-102	VOC	7.57	2.35
		Benzene	0.23	0.07
390-102 MSS	DEFR Tank 390-102 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-106	DEFR Tank 390-106	VOC	7.57	2.35
		Benzene	0.23	0.07
390-106 MSS	DEFR Tank 390-106 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-107	DEFR Tank 390-107	VOC	7.57	2.35
		Benzene	0.23	0.07
390-107 MSS	DEFR Tank 390-107 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-108	DEFR Tank 390-108	VOC	7.57	2.35
		Benzene	0.23	0.07

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
390-108 MSS	DEFR Tank 390-108 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-109	DEFR Tank 390-109	VOC	7.57	2.35
		Benzene	0.23	0.07
390-109 MSS	DEFR Tank 390-109 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-110	DEFR Tank 390-110	VOC	7.57	2.35
		Benzene	0.23	0.07
390-110 MSS	DEFR Tank 390-110 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
320-111	DEFR Tank 320-111	VOC	8.40	2.25
		Benzene	0.25	0.07
320-111 MSS	DEFR Tank 320-111 Uncontrolled	VOC	326.70	--
		Benzene	9.81	--
210-117	DEFR Tank 210-117	VOC	10.31	1.89
		Benzene	0.31	0.06
210-117 MSS	DEFR Tank 210-117 Uncontrolled	VOC	259.20	--
		Benzene	7.78	--
210-118	DEFR Tank 210-118	VOC	10.31	1.89
		Benzene	0.31	0.06
210-118 MSS	DEFR Tank 210-118 Uncontrolled	VOC	259.20	--
		Benzene	7.78	--
127-100	DEFR Tank 127-100	VOC	13.17	1.51
		Benzene	0.40	0.04
127-100 MSS	DEFR Tank 127-100 Uncontrolled	VOC	196.79	--
		Benzene	5.91	--
105-101	DEFR Tank 105-101	VOC	14.45	1.40
		Benzene	0.44	0.04
105-101 MSS	DEFR Tank 105-101 Uncontrolled	VOC	177.52	--
		Benzene	5.33	--

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
	Tank Group 2 VOC and Benzene Compliance Caps (Production Only)	VOC	--	18.78
		Benzene	--	0.69
<b>Tank Group 3</b>				
390-130	DEFR Tank 390-130	VOC	7.58	2.60
		Benzene	0.23	0.07
390-130 MSS	DEFR Tank 390-130 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-132	DEFR Tank 390-132	VOC	7.56	2.19
		Benzene	0.23	0.05
390-132 MSS	DEFR Tank 390-132 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-133	DEFR Tank 390-133	VOC	7.56	2.19
		Benzene	0.23	0.05
390-133 MSS	DEFR Tank 390-133 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-134	DEFR Tank 390-134	VOC	7.56	2.19
		Benzene	0.23	0.05
390-134 MSS	DEFR Tank 390-134 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-128	DEFR Tank 390-128	VOC	7.56	2.19
		Benzene	0.23	0.05
390-128 MSS	DEFR Tank 390-128 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-125	DEFR Tank 390-125	VOC	7.56	2.19
		Benzene	0.23	0.05
390-125 MSS	DEFR Tank 390-125 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
390-126	DEFR Tank 390-126	VOC	7.56	2.19
		Benzene	0.23	0.05
390-126MSS	DEFR Tank 390-126 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
390-127	DEFR Tank 390-127	VOC	7.56	2.19
		Benzene	0.23	0.05
390-127 MSS	DEFR Tank 390-127 Uncontrolled	VOC	367.47	--
		Benzene	11.03	--
210-129	DEFR Tank 210-129	VOC	10.29	1.71
		Benzene	0.31	0.04
210-129 MSS	DEFR Tank 210-129 Uncontrolled	VOC	259.20	--
		Benzene	7.78	--
127-131	DEFR Tank 127-131	VOC	13.17	1.43
		Benzene	0.40	0.03
127-131 MSS	DEFR Tank 127-131 Uncontrolled	VOC	196.79	--
		Benzene	5.91	--
	Tank Group 3 VOC and Benzene Compliance Caps (Production only)	VOC	--	16.80
		Benzene	--	0.49
<b>MSS Operations</b>				
	Tank Groups 1 and 2 MSS Uncontrolled VOC and Benzene Compliance Subcaps (Tank MSS Only)	VOC	--	6.22
		Benzene	--	0.36
	Tank Group 3 Plus 390-130 MSS Uncontrolled VOC and Benzene Compliance Subcaps (Tank MSS Only)	VOC	--	2.35
		Benzene	--	0.08
MSS-1	Other MSS	VOC	92.66	--
		Benzene	2.78	--
		NO <sub>x</sub>	3.60	--
		CO	46.32	--
PORTVC	Portable Vapor Combustor (4 vapor combustors running simultaneously) for All Site-wide Tank and Other MSS	VOC	156.16	--
		Benzene	1.64	--
		NO <sub>x</sub>	3.60	--
		CO	46.32	--

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
	Annual MSS Compliance Caps (for All Sitewide Uncontrolled Tank Group MSS, MSS-1, and PORTVC)	VOC	--	14.98
		Benzene	--	0.62
		NO <sub>x</sub>	3.60	4.78
		CO	46.32	53.53
<b>Equipment Fugitives</b>				
FUG 1	No. 1 Manifold Fugitives (5)	VOC	0.50	2.15
		Benzene	0.03	0.09
FUG 2	No. 2 Manifold Fugitives (5)	VOC	0.03	0.13
		Benzene	0.01	0.01
<b>Oil/Water Separators</b>				
OWS-1	Oil/Water Separator 1	VOC	5.89	0.15
OWS-2	Oil/Water Separator 2	VOC	5.89	0.15
<b>Engines</b>				
EMERGEN1	Emergency Generator Engine 1	VOC	0.18	0.01
		NO <sub>x</sub>	1.81	0.10
		CO	1.52	0.08
		SO <sub>2</sub>	1.12	0.06
		PM <sub>10</sub>	0.12	0.01
		PM <sub>2.5</sub>	0.10	0.01
FIREPUMP1	Firepump Engine 1	VOC	0.29	0.12
		NO <sub>x</sub>	2.96	1.08
		CO	2.48	0.90
		SO <sub>2</sub>	1.83	0.66
		PM <sub>10</sub>	0.19	0.08
		PM <sub>2.5</sub>	0.16	0.06
FIREPUMP2	Firepump Engine 2	VOC	0.29	0.12
		NO <sub>x</sub>	2.96	1.08
		CO	2.48	0.90
		SO <sub>2</sub>	1.83	0.66
		PM <sub>10</sub>	0.19	0.08
		PM <sub>2.5</sub>	0.16	0.06

## Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
FIREPUMP3	Firepump Engine 3	VOC	0.29	0.12
		NOx	2.96	1.08
		CO	2.48	0.90
		SO <sub>2</sub>	1.83	0.66
		PM <sub>10</sub>	0.19	0.08
		PM <sub>2.5</sub>	0.16	0.06
	Annual Engine Compliance Caps for Emergency Generator Engine 1, Firepump Engine 1, Firepump Engine 2, and Firepump Engine 3	VOC	--	0.25
		NOx	--	2.26
		CO	--	1.88
		SO <sub>2</sub>	--	1.38
		PM <sub>10</sub>	--	0.17
		PM <sub>2.5</sub>	--	0.13
<b>Diesel Tanks</b>				
DTANK-1	Diesel Tank 1	VOC	0.06	0.001
DTANK-2	Diesel Tank 2	VOC	0.06	0.009
DTANK-3	Diesel Tank 3	VOC	0.06	0.009
	Annual Diesel Tank Compliance Cap	VOC	--	0.01

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
 NOx - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
 CO - carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: October 31, 2014